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THE AMERICAN ELEVATOR AND GRAIN TRADE



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A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

One Dollar Per Annum
SINGLE COPIES, 15 CENTS

VOL. XL

431 South Dearborn Street, Chicago, Ill., January 15, 1922.

NO. 7

WE ARE PROGRESSIVE ENOUGH
TO BE AGGRESSIVE FOR YOU

McKENNA & DICKEY
Grain

60 BOARD OF TRADE

For your
Business Sake
Communicate

HARRIS, WINTHROP & CO.

52 Broadway, New York

The Rookery, Chicago

GRAIN—STOCKS—BONDS

MEMBERS

New York Stock Exchange New York Cotton Exchange
New York Produce Exchange Chicago Stock Exchange
New York Coffee Exchange Chicago Board of Trade
Winnipeg Grain Exchange Kansas City Board of Trade
Minneapolis Chamber of Commerce

ANNOUNCEMENT

We wish to announce that

MR. GEORGE A. PLUMMER

(formerly with E. W. Wagner & Co.)

became associated with us January 5

Chicago Office:
332 So. La Salle St.
New York Office:
71 Broadway

DEAN, ONATIVIA & CO.

Members:
New York Stock Exchange
New York Cotton Exch.
Chicago Stock Exchange
Chicago Board of Trade

Buyers
OF

Clover

AND

**Timothy
Seed**

Mail Samples for Top Market Bids

**Milwaukee
Seed Company**

MILWAUKEE, WIS.

THE ILLINOIS SEED CO.
GRASS SEEDS FIELD

BUYERS CHICAGO SELLERS

Ask for Samples

Mail Samples for Bid

TIMOTHY, CLOVERS, ALSIKE, ALFALFA, MILLETS, RED-
TOP, BLUEGRASS, SEED GRAIN, GRAIN BAGS, Etc.

J. A. BENSON COMPANY

Receivers and Shippers

HAY, STRAW, GRAIN AND MILL FEEDS

Room 904
Postal Telegraph Bldg.

CHICAGO, ILL.

**Preston
Lansing**
Ship-Lap Blocks

Build better grain storage bins. First cost
only cost. Write for circular.

J. M. Preston Co.
Dept. 426, Lansing, Mich.

COURTEEN SEED CO.

Specialize in all

GRASS AND FIELD SEEDS

SHIPPERS. Send Samples for Bid.
BUYERS. Ask for samples and prices.

MILWAUKEE, WISCONSIN

BACHE SERVICE

USE IT
ON

GRAIN AND SEEDS

Chicago, Ill.

CHICAGO

is always a good market for hay. Upwards of 142,000 tons were received in this city last year.

Are you getting satisfactory prices
and returns on your shipments?

Why Not Try

ALBERT MILLER & CO.

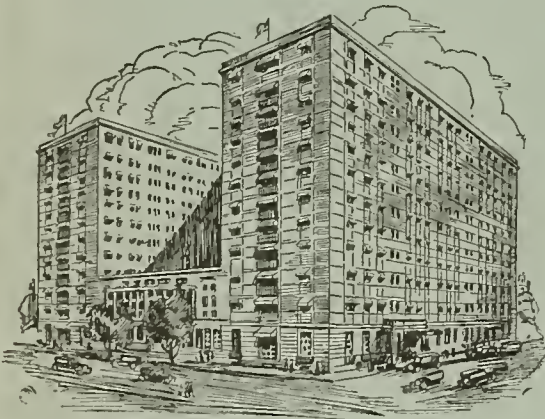
192 No. Clark Street

Chicago, Ill.

Our Business is Selling Hay

GOOD SALES

PROMPT RETURNS



Where to Stop in Minneapolis

THE CURTIS HOTEL

Tenth St., 3rd to 4th Aves., MINNEAPOLIS, U. S. A.
Six Blocks From the Chamber of Commerce.

Every Room an Outside Room. Every Room with Private Bath.

**This Hotel Caters to the Grain and Milling
Trade—Especially Suited to Conventions**

Average rate for room and bath—\$2.50 single—\$3.50 double.

Entertaining programs are rendered daily during luncheon and dinner hour on the great pipe organ in main restaurant by Dr. Frederic Tristram Egener. Orchestra music daily during dinner hour.

One whole city block of beautiful lobbies, ball rooms, billiard rooms, chocolate shop, beauty shop, barber shop, tailor shop, physical culture and bath department, cigar and news stands, delicatessen shop, etc., are operated in this hotel for the convenience and entertainment of our guests.

Since 1893—28 Years Manufacturers of Scales

COLUMBIA MOTOR TRUCK SCALES Are the BEST—"SAVE REPAIR BILLS"

Because they are easy to build, simple in construction, well made and retain their accuracy longer than any scale on the market.

COLUMBIA SCALES are being used by practically every feed, coal, ice and material dealer in Chicago.

THERE MUST BE A GOOD REASON

COLUMBIA SCALE COMPANY

F. Beuckman & Son, Props.

Telephone Albany 4
2437-43 N. Crawford Avenue

CHICAGO, ILLINOIS

Save money and send for list of our guaranteed rebuilt scales. All makes and capacities. Tell us what you want. Let us repair your scales—any make. We also carry parts. Finest equipment for scale work in Chicago.



Columbia Motor Truck Scale
installed at the large plant of the
Western Feed Manufacturers, Inc., Chicago



"Western" Pitless Sheller

It's Your Money—Get All You Can for It

That's not selfish, it's sensible; and besides it's good business. Get all the quality in your purchase of machinery that you're entitled to; all the long wear; all the value. Your money will secure most for you if expended in

THE WESTERN LINE

Our 1922 line includes the following:

Grain Cleaners
Corn Shellers
Drag Chains
Elevator Buckets
Elevator Boots
Iron Turn Heads
Power Shovels
Grain Conveyors
Belting

Feed Gates
Distributors
Dump Controllers
Man Lifts
Oil Cups
Car Loading Spouts
Car Pullers
Wire Rope
Iron Pulleys

Elevator Heads
Idlers
Belt Lacing
Trippers
Post Hangers
Pillow Blocks
Shafting
Grain Dumps
Etc., Etc., Etc.

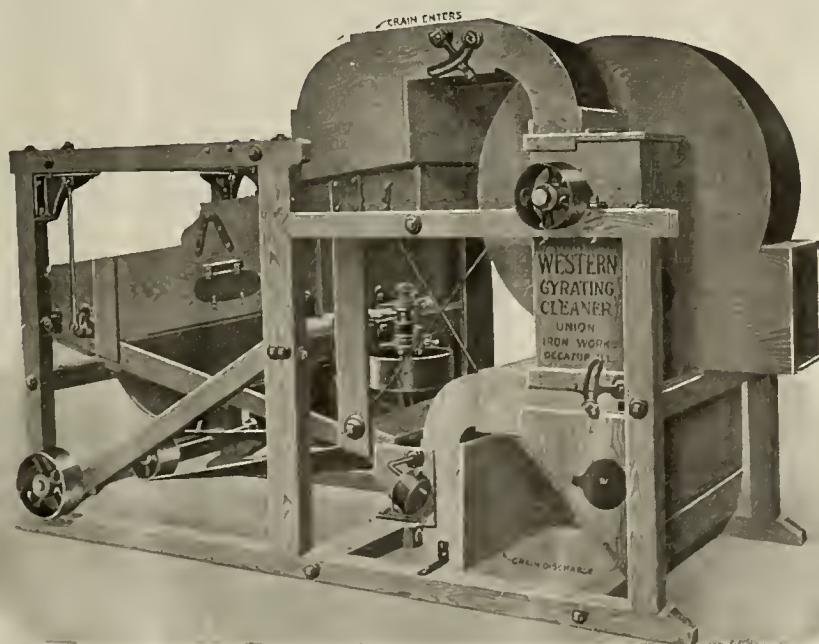
*Everything for Elevator or Mill
Send for General Catalog No. 27*

UNION IRON WORKS

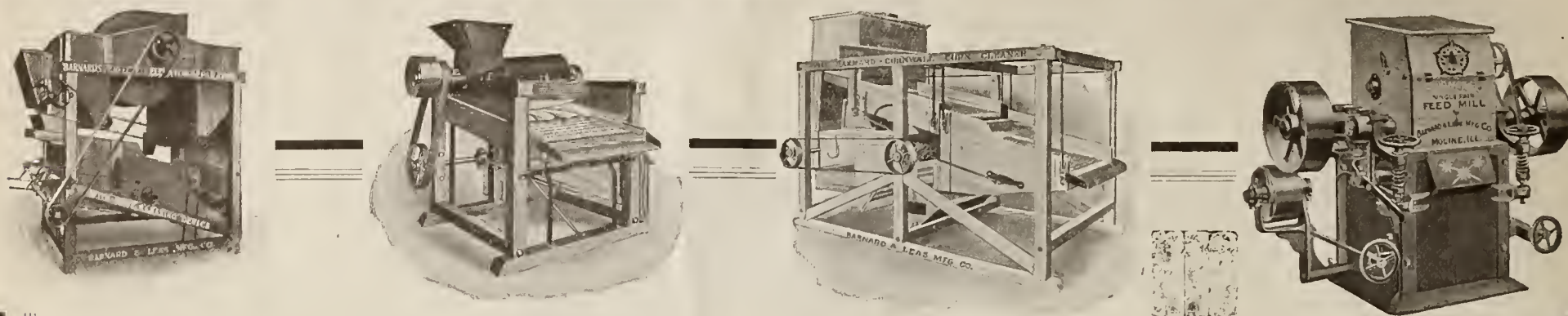
DECATUR



ILLINOIS



"Western" Gyrating Cleaner



SAVE TIME AND MONEY! BUY YOUR

Grain Elevator, Corn and Feed Mill, Conveying and Power Transmission Machinery

DIRECT FROM THE MANUFACTURER

Attrition Feed Mills
Buhr Feed Mills
Corn Shellers
Corn Cleaners
Dust Collectors
Ear Corn Crushers
Employs Elevators
Exhaust Fans
Feeders and Mixers
Feed Packers
Feed Screens
Grain Dryers
Grain Scourers
Grain Separators
Man Lifts
Magnetic Separators
Meal Sifters
Roller Feed Mills

Automatic Grain Scales
Belting, all kinds
Belt Supplies
Belt Conveyors
Car Pullers
Conveyor Parts
Distributing Spouts
Elevator Supplies
Grain Samplers
Grain Testers
Hopper Scales
Loading Spouts
Perforated Metals
Power Grain Shovels
Steel Conveyors
Steel Grain Scoops
Wagon & Truck Dumps
Wheat Steamers

Bearings, all kinds
Belt Idlers
Belt Tighteners
Cast Iron Pulleys
Couplings, all kinds
Drop and Post Hangers
Friction Clutches
Gearing, all kinds
Link-Belt
Manila Rope
Pillow Blocks
Rope Sheaves
Safety Set Collars
Sprocket Wheels
Steel Shafting
Tension Carriages
Wire Rope
Wood Split Pulleys

Let Us Quote on Your Requirements



BARNARD & LEAS MFG. CO.

MILL BUILDERS AND
MILL FURNISHERS

ESTABLISHED 1860. MOLINE, ILLINOIS, U.S.A.





The Mark of Quality

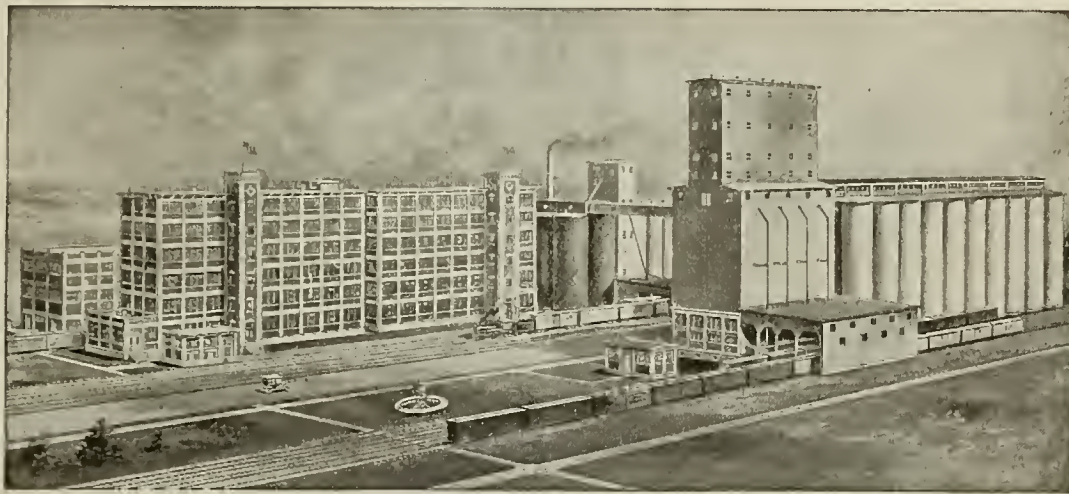
Conveying and Power Transmitting Machinery

FOR THE LARGE AND SMALL ELEVATOR AND MILL

Endurance is the Test of Quality

WELLER MADE EQUIPMENT STANDS THE TEST

Plant of the
Southwestern
Milling Co.,
Kansas City,
Kansas



Equipped With
Weller-Made
Elevating and
Conveying
Machinery

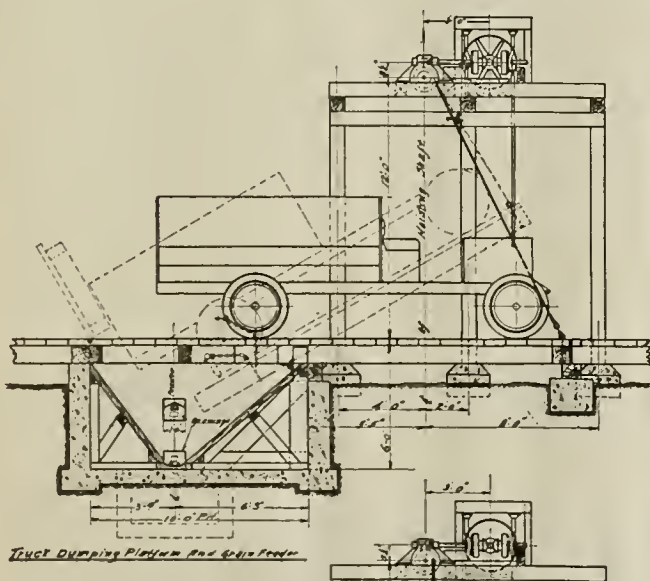
Most of the large and a great number of the small elevators and mills built in the past thirty years are equipped with Weller-Made Machinery—it is a matter of pride with us that many of our customers who, when starting, bought of us, when they were ready to expand specified for equipment made by Weller.

We design and make a complete line of Elevating, Conveying and Power Transmitting Machinery adapted to the handling of Grain, Coal, Etc.

You are invited to correspond with us about your equipment needs. Our engineering department is able to render most satisfactory service with layouts and suggestions and to carry out your wishes.

Catalogue "M" Grain Elevators—Sent on Request.

WELLER TRUCK AND WAGON DUMP



Can be installed in any elevator.

Does not require the services of an expert; anyone familiar with tools and machinery can build the frame and install the lift.

Once erected it requires very little attention.

All the mechanism is overhead in full view of the operator at all times.

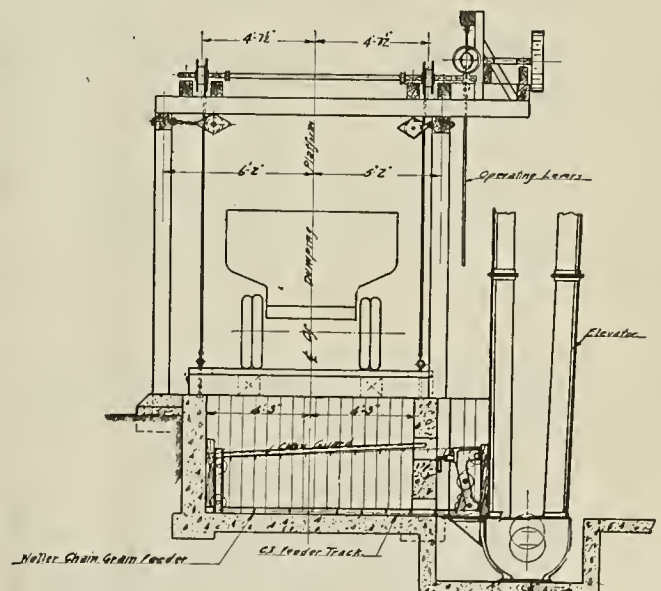
Easily controlled.

Worm gear on hoisting shaft gives positive lock at any point of lift.

No brakes; no air chambers; no hydraulic pumps.

Can be attached to line shafting, operated by motor, gas engine or arranged for hand power.

WRITE FOR INFORMATION



WELLER MFG. CO.

Main Office and Works, 1820 to 1856 N. Kostner Ave.

CHICAGO, ILL.

BRANCHES

NEW YORK

BOSTON

BALTIMORE

PITTSBURGH

SALT LAKE CITY

SAN FRANCISCO

Indianapolis—Your Market

Indianapolis is known as the largest inland railroad city in the country and is the natural destination for shipments of grain from Indiana, Illinois, Ohio, Michigan, Wisconsin and states adjoining.

Its geographical location together with its railroads radiating to all sections of the country, makes it a logical outlet and distributing point to the East, South and Southeast.

These splendid railroad facilities assure quick handling of shipments with prompt returns on same.

Indianapolis also takes a natural



The Indianapolis Board of Trade

pride in having the largest corn mills in the country which, together with its flour mills and vast array of manufacturing industries, creates an exceedingly large local consumption of wheat, corn, oats, rye and hay annually.

This local and foreign demand makes for top prices on all shipments.

The market's adequate weighing facilities, its efficient inspection department, and increased elevator storage and drying equipment makes Indianapolis more and more important each season as a market for shippers and buyers of grain, hay and feeds.

Route your grain and hay to any of the following firms, all devoted to your interests and all members of the

INDIANAPOLIS BOARD OF TRADE

BINGHAM-HEWETT-SCHOLL CO., Grain Merchants

BERT A. BOYD GRAIN CO., Grain Commission

CLEVELAND GRAIN & MILLING CO., Grain Commission

THE EARLY & DANIEL CO., Grain Commission Merchants and Buyers

HEINMILLER GRAIN CO., Receivers and Shippers

LAMSON BROS. & CO., Grain, Seeds

FRANK A. WITT, Grain Commission and Brokerage

McCARDLE-BLACK CO., Grain Merchants

CARL D. MENZIE GRAIN & BROKERAGE CO.,
Brokers and Grain Commission

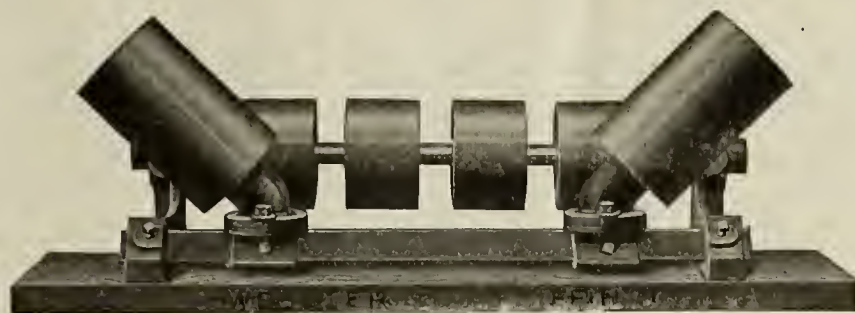
MUTUAL HAY & GRAIN CO., Hay and Grain.

STEINHART GRAIN COMPANY, Grain Commission

SWAN GRAIN CO., Wheat, Corn, Oats, Rye.

H. E. KINNEY GRAIN CO., Receivers and Shippers

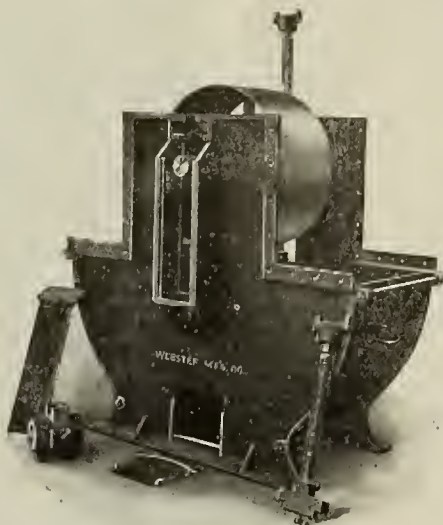
WEBSTER EQUIPMENT



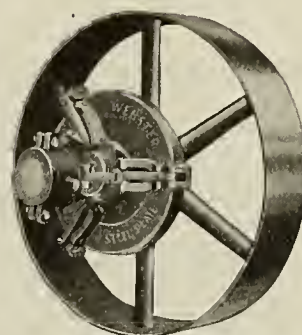
Troughing Belt Carriers



Elevator Buckets



Elevator Boot



Friction Clutch

FOR over forty years Webster Conveying, Elevating, and Power Transmission machinery has stood the test of service. It is good machinery, built to a quality standard.

We design and build EVERYTHING that goes into the modern elevator. Our engineers will be glad to go over specific requirements, either on new structures, repairs or extensions, and make recommendations.

THE WEBSTER MFG. COMPANY

4500-4560 CORTLAND ST., CHICAGO

Factories-Tiffin, O. and Chicago - Sales Offices in Principal Cities

CINCINNATI

THE GATEWAY TO THE SOUTH AND EAST

Has the "square deal" plugging system for hay.

Has reconsignment and transit privileges and other favorable points which insures most successful handling of grain or hay shipments.



Home of the Cincinnati Grain and Hay Exchange

Is the terminal point for 200,000 miles of railways and therefore a convenient shipping point for the country dealer, and local buyers are enabled to distribute all products quickly and to best advantage. Has weighing and inspection service second to none and up-to-date grain and hay merchants constantly safeguarding their patrons' interests.

Those are just a few of the reasons why you should ship your Grain and Hay to Cincinnati. Ship to any of the following responsible grain and hay firms, all members of the

Cincinnati Grain & Hay Exchange

A. BENDER, Flour, Grain and Feeds

BINGHAM-SCHOLL GRAIN CO., Grain Exclusively

BROUSE-SKIDMORE GRAIN CO., Grain, Hay, Feed

BLUMENTHAL, MAX, Grain and Feed

THE D. O. CROSS CO., Grain, Hay, Mill Feeds

DE MOLET GRAIN CO., Grain and Hay

EARLY & DANIEL CO., Hay, Grain, Feed

FITZGERALD BROS. CO., Grain and Hay

GALE GRAIN CO., THE A. C., Grain and Hay

DAN B. GRANGER & CO., Hay and Grain

MUTUAL COMMISSION COMPANY, Strictly Commission

THE NUTRITIA PRODUCTS CO., Feeds

SMITH, EDW. A., Receiver and Shipper of Hay

Price Insurance and the Speculative Grain Market

The Chicago Board of Trade is a meeting place for the buyers and sellers of actual grain and other food stuffs. The so-called speculative market is merely an important element in the marketing. Germany's attempt to eliminate it some years ago resulted in chaos and it had to be re-established.

It is a principle of economics that there can be no ownership of property without risk. Whether a transaction be in real estate, bonds, brick, wheat or what not, the element of risk is present. It is all a speculation. The buying and selling of grain for future delivery is neither more nor less speculative than in other property. In the grain exchange system the universal instinct to "take a chance" has been harnessed for the public good.

By reason of the speculative market in grain the process known as hedging is possible. Hedging affords an insurance to owners of actual grain against loss by fluctuation in the period, let us say, between its leaving the country elevator and its reappearance as flour in an English mill. Hedged grain is grain which carries insurance against loss to the owner by price changes. This insurance is as necessary as insurance on one's house. As the speculative market alone affords this insurance, its important place in grain marketing must be recognized. By reason of this protection the farmer receives more for his grain; the consumer pays less.

THE CHICAGO BOARD OF TRADE

The First National Bank of Chicago

(CHARTER N. 8.)

Statement of Condition, Close of Business December 31, 1921.

ASSETS.

Loans and Discounts.....	\$143,006,348.28
United States Bonds and Certificates.....	2,306,246.00
Bonds to Secure U. S. Postal Savings Deposits..	752,500.00
Other Bonds and Securities (market value).....	5,676,435.86
National Safe Deposit Co. Stock (Bank Bldg.)..	2,684,000.00
Federal Reserve Bank Stock Subscription.....	750,000.00
Customers' Liability under Letters of Credit...	3,411,886.74
Customers' Liability Account of Acceptances..	10,267,753.23

Cash Resources

Due from Federal Reserve Bank.	\$18,331,517.81
Cash and Due from Banks.....	38,340,050.46
Other Assets	236,563.60
	\$225,763,301.98

LIABILITIES.

Capital Stock Paid In.....	\$ 12,500,000.00
Surplus Fund	12,500,000.00
Other Undivided Profits.....	3,768,512.10
Discount Collected but Not Earned.....	1,033,501.26
Dividends Unpaid	686,900.50
Reserved for Taxes.....	1,786,259.97
Rediscounts with Federal Reserve Bank.....	None
Cash Letters of Credit.....	545,292.78
Liability Under Letters of Credit.....	3,373,581.19
Liability Account of Acceptances.....	11,208,377.74
Time Deposits	\$ 1,200,869.48
Demand Deposits.....	174,647,967.88
Liabilities other than those above stated.....	2,512,039.08
	\$225,763,301.98

James B. Forgan, Chairman of the Board Frank O. Wetmore, President

Division "A"

C. V. Essroger, Vice-President H. A. Anderson, Assistant Vice-President
Collateral Stocks and Bonds Grain Flour and Feed
Meat Products, Live Stock Commission Coal Doctors and Lawyers

Division "B"

H. H. Heins, Vice-President Thomas J. Nugent, Assistant Vice-President
O. C. Brodhay, Assistant Vice-President
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Hats and Caps Jewelry and Merchandising Sundries Transportation Ladies

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Iron and Steel Products Lumber, Furniture, etc. Manufacturing and Sundries
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Guy W. Cooke, Assistant Cashier A. B. Johnston, Assistant Cashier

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Domestic Exchange Department

Robert F. Green, Manager

Auditing Department

H. L. Droegemueller, Auditor

Credit and Statistical Department

Edward M. Tourtelot, Manager

John P. Oleson, Vice-President

Division "D"

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Stone, Brick, Cement, Contractors Wall Paper, Paints, Oils, Glass, etc.
Boots, Shoes, Leather, Hides and Wool Real Estate and Insurance
Publishing, Printing, Engraving and Paper Miscellaneous

Division "E"

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Sugar Manufacturers and Dealers, Confectionery, etc. Maltsters and Beverages
Tobacco Restaurants, Bakers and Hotels

Division "F"

John F. Hagey, Vice-President R. F. Newhall, Vice-President and Cashier
G. H. Dunscomb, Asst. Vice-President J. P. McManus, Asst. Vice-President
Banks and Bankers
G. B. Allmendinger, Assistant Cashier H. R. Ross, Assistant Cashier
Walter Lichtenstein, Executive Secretary

Law Department

Edward E. Brown, Vice-President and General Counsel
John N. Ott, Attorney

Discount and Collateral Department

A. V. Dillon, Manager



First Trust and Savings Bank

Statement of Condition at the Close of Business December 31, 1921.

ASSETS.

Bonds	\$ 28,900,428.87
Time Loans and Discounts.....	50,303,129.74
Federal Reserve Bank Stock.....	375,000.00
Customers' Liability for Acceptances.....	2,220,000.00
Demand Loans	\$15,347,962.39
Due from Federal Reserve Bank..	4,344,415.37
Cash and Due from Banks.....	7,383,018.70
	\$108,873,955.07

LIABILITIES.

Capital Stock Paid In.....	\$ 6,250,000.00
Surplus Fund	6,250,000.00
Undivided Profits	1,813,216.27
Reserve for Taxes and Interest.....	2,724,180.14
Acceptances Executed for Customers.....	2,220,000.00
Unearned Discount	135,260.72
Time Deposits.....	\$69,110,197.14
Demand Deposits.....	20,371,100.80
	\$108,873,955.07

James B. Forgan, Chairman of the Board

Melvin A. Traylor, President

Frank O. Wetmore, Vice-President

B. C. Hardenbrook.....Vice-President
Frank M. Gordon.....Vice-President
Louis Boisot.....Vice-President
Roy C. Osgood.....Vice-President
John C. Mechem.....Vice-President
Robert D. Forgan.....Treasurer
David V. Webster.....Secretary
A. W. Converse.....Cashier

Oliver A. Bestel.....Trust Officer
C. G. Fleager.....Asst. Treasurer
G. R. Rochm.....Mgr. Savings Dept.
I. L. Porter.....Mgr. Bond Dept.
E. A. Stake.....Asst. Cashier
J. H. Templeton.....Asst. Mgr. Bond Dept.
D. W. Westervelt.....Asst. Cashier
Joseph R. Julin.....Asst. Trust Officer

H. H. Alhorn.....Asst. Trust Officer
W. W. O'Brien.....Asst. Trust Officer
Edward Rohyn.....Asst. Cashier
Roy R. Marquardt.....Asst. Cashier
Thomas S. McCarty.....Asst. Cashier
W. K. Harrison.....Asst. Secretary
F. J. Shannon.....Asst. Trust Officer
Robt. L. Davis, Mgr. Real Estate Dept.

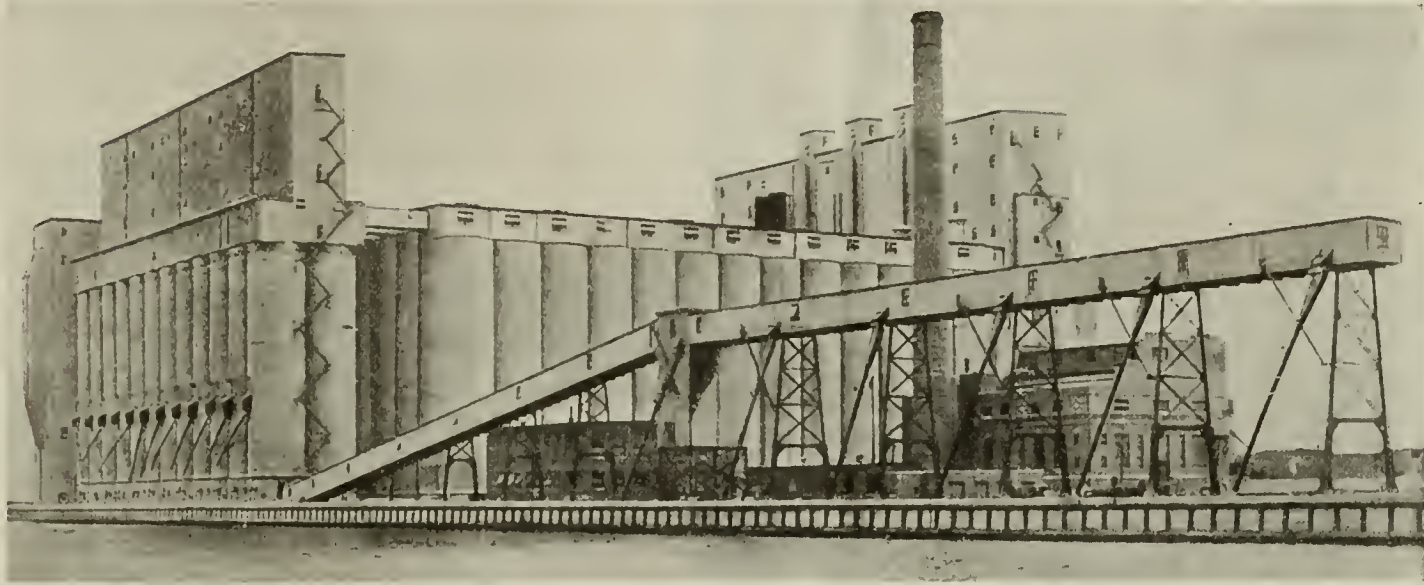
S. J. Donaldson.....
Asst. Manager Real Estate Dept.
Louis K. Boysen.....
Manager Real Estate Loan Dept.
H. L. Droegemueller.....Auditor
J. P. McElherne.....Asst. Auditor
Walter Lichtenstein.....Exec. Secretary
Edward E. Brown.....General Counsel
John N. Ott.....Attorney

Combined Deposits of Both Banks, \$265,330,135.30.

Largest Grain Elevator in the World

** Capacity 10,000,000 Bushels*

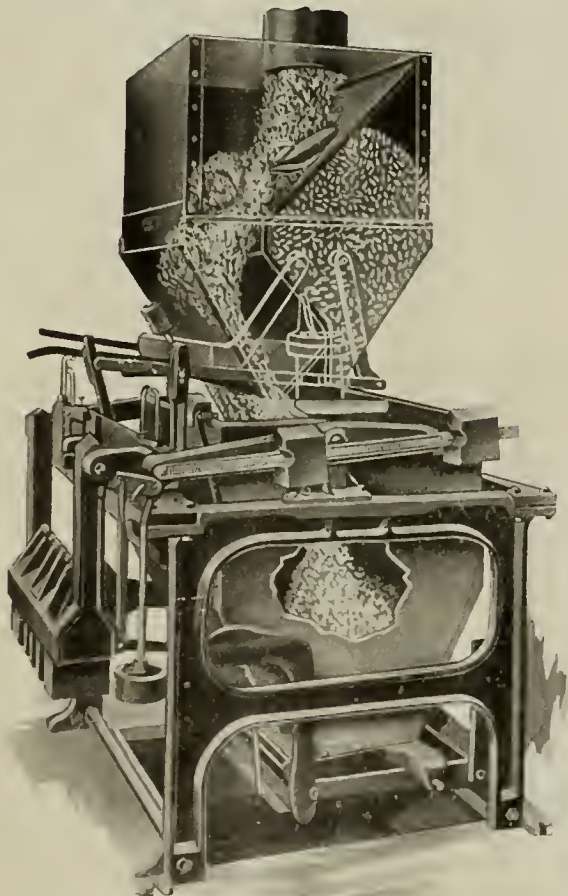
OWNERS — CHICAGO AND NORTH WESTERN RAILWAY CO. OPERATORS — ARMOUR GRAIN CO.
CONTRACTORS — WITHERSPOON-ENGLAR CO. ENGINEERS — JOHN S. METCALF CO.



In rebuilding this mammoth elevator RELIANCE AUTOMATIC SCALES will be installed.

The John S. Metcalf Co. indicate that every known improvement in the mechanical design of a perfect elevator enter into the new work which will be a monument to the Engineers, Contractors, Owners and Operators.

RELIANCE CONTINUOUS WEIGHING AND SACKING AUTOMATIC SCALES have set a precedent for the past 25 years and have been selected by the engineers and contractors because of their dependability and accuracy. They are positive in operation and in their design a much further advance has been made toward the absolute perfection of automatic scales than has ever been attempted by any other manufacturer.

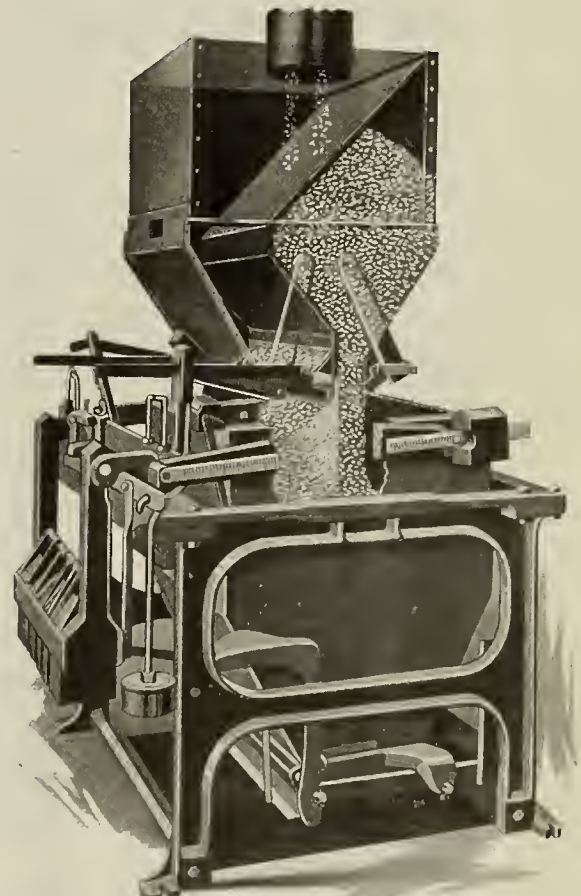


Profits in the handling

of grain do not justify

any generosity in the

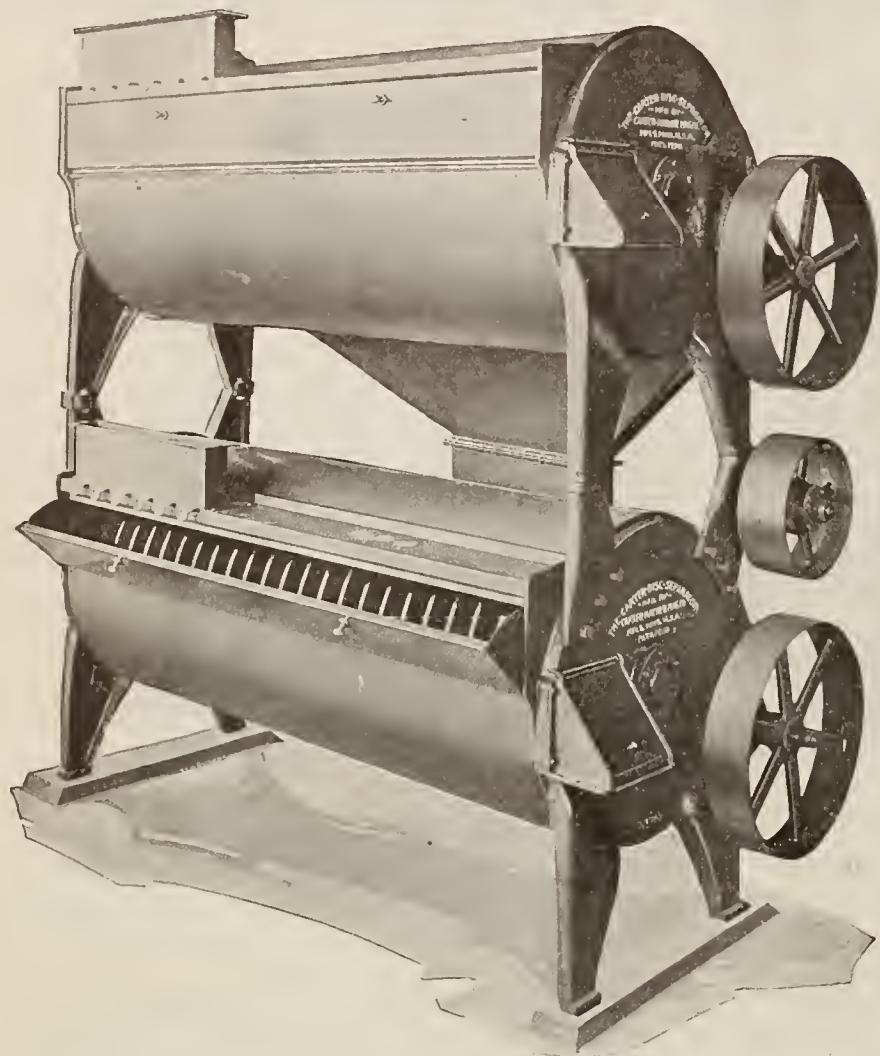
matter of weights.



Reliance Automatic Hopper Scales
"Speed with Accuracy"

Be Sure the Automatic Scale You Buy is a Reliance

RELIANCE WEIGHING MACHINE DIVISION
STEARNS MOTOR MANUFACTURING CO.
GENERAL OFFICE AND FACTORY
LUDINGTON, MICHIGAN.



This is one of the four double unit Carter Disc Separators being installed in the

Chicago - Northwestern
R. R. Terminal Elevator

for removing

—oats and barley
from wheat,

—wheat from barley
and oats,

—oats from rye

CARTER
DISC
SEPARATOR

is also ideal for cleaning seed oats

Each machine contains 23 discs mounted on a horizontal shaft and revolving in the grain. Small pockets on the discs pick out the wheat and reject all material larger than wheat.

Increases the Test Weight of Wheat

The scouring action of the discs revolving through the grain rubs off the fuzz. This raises the test weight about one pound per bushel. Many elevators put their wheat through a Carter-Disc Separator simply to raise the test weight. Of course, the oats are removed at the same time.

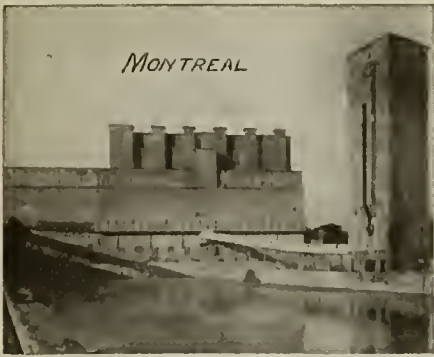
For No Dockage Separation Use Carter Disc Separators

No Maintenance expense.
No Dust
No Screens
No Brushes
All Rotary Motion

Try it at Our Risk

Write for full information and our unequalled guarantee and trial proposition.

Carter-Mayhew Mfg. Co., 631 Fifth Ave. South, Minneapolis, Minn.



MONTREAL

John S. Metcalf Co.

Grain Elevator Engineers



MANCHESTER
ENGLAND



SYDNEY, AUSTRALIA.



BUENOS AIRES

OFFICES

108 So. La Salle St., Chicago, Ill.
54 St. Francois Xaxier St., Montreal, Canada.
395 Collins St., Melbourne, Australia.
639 Calle Maipu, Buenos Aires, Argentina.



CHICAGO

L. A. STINSON CO.

Engineers and General Contractors

ELEVATORS, MILLS AND WAREHOUSES
COMPLETE

National Life Building Chicago, Ill.

General Overhauling and Improvements

P. F. McALLISTER & CO.

CONTRACTORS - DESIGNERS

Grain Elevators Ear-Corn Plants

COMPLETE

Locust Street Viaduct

Bloomington, Ill.

ARE YOU WORRIED

about the condition of that grain in your bins?
Let us equip your storage with a

Zeleny Thermometer System

to tell you the exact condition of
the grain and cut out the worry

Over 100 Elevators Equipped

Write for Description

WESTERN FIRE APPLIANCE WORKS

542 South Dearborn Street

Chicago

BECAUSE of our many years' experience as specialists in the erection of buildings for the Milling and Grain Trade, we are in a position to give to your building problems the benefit of a vast amount of valuable, practical knowledge.

THIS knowledge put into effect by our specially trained organizations means a big saving to you in construction costs.

Let us submit estimates and sketches without charge on any contemplated improvements.

THE SPENCER CONSTRUCTION Co.

Builders of Mill Buildings, Grain Storages,
Warehouses, Coal Pockets

514 Garrett Building

Baltimore, Md.

MACDONALD ENGINEERING CO. CONSTRUCTING ENGINEERS

New York
90 West St.

Chicago
53 W. Jackson Blvd.

San Francisco
149 California St.

DESIGNERS AND BUILDERS
OF

GRAIN ELEVATORS, FLOUR MILLS, WAREHOUSES,
COLD STORAGE PLANTS, COAL STORAGE, ETC.
SEND US YOUR INQUIRIES



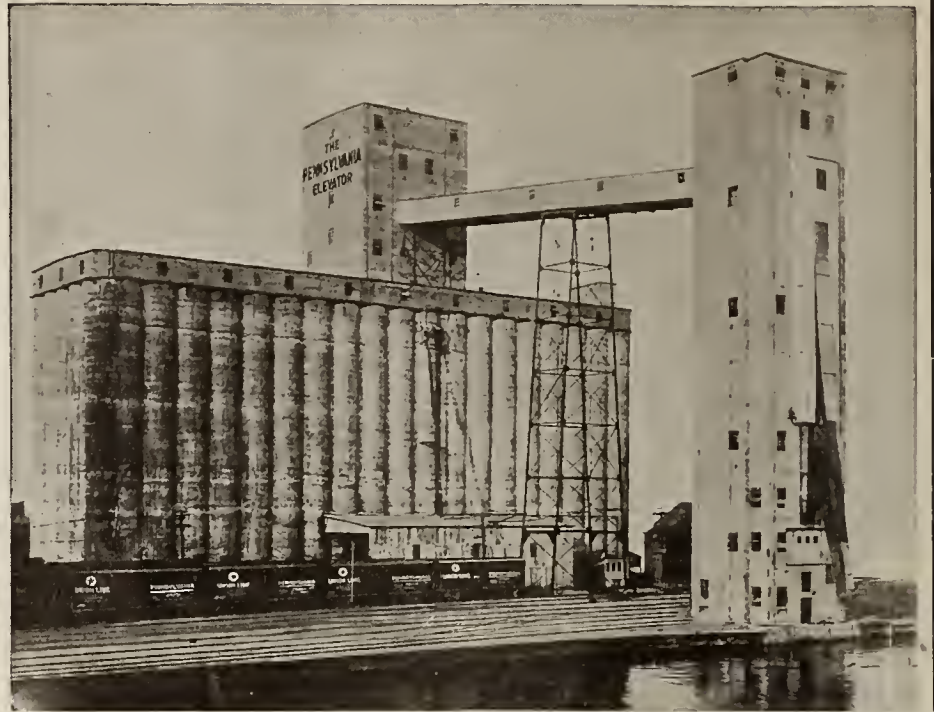
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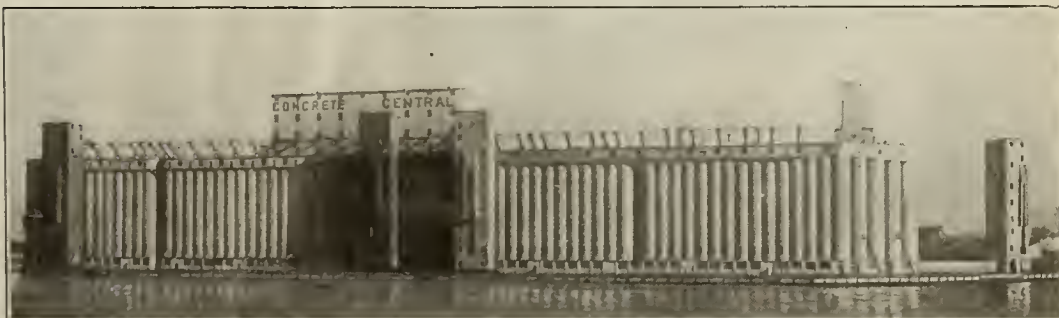
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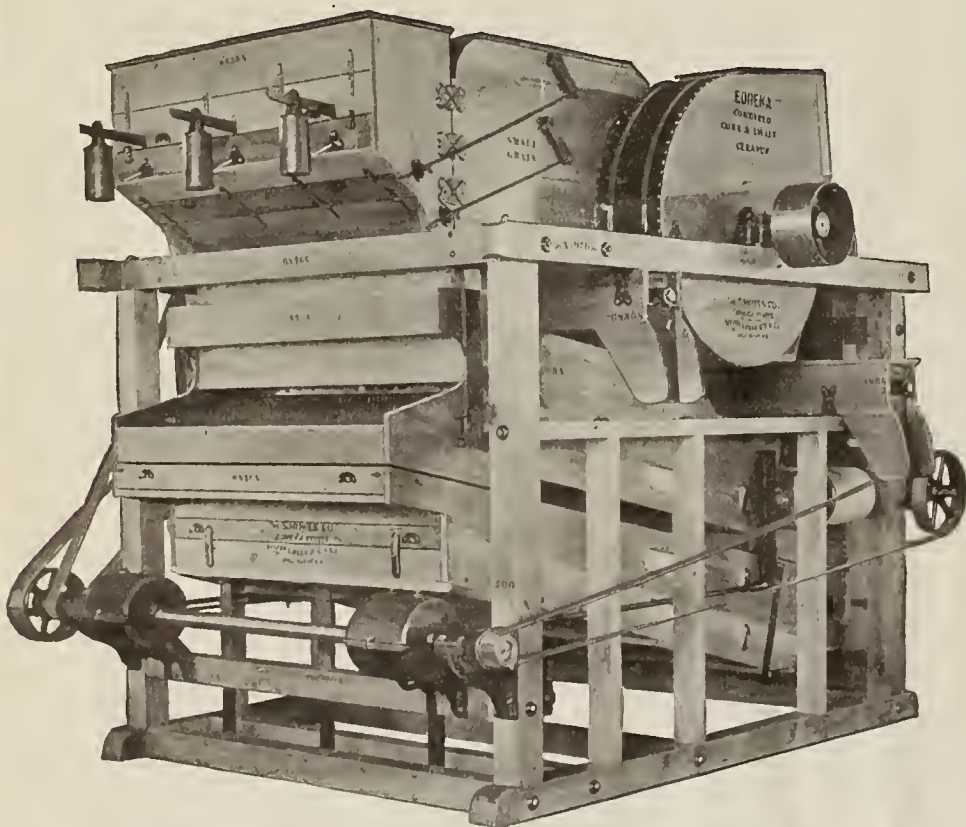
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CORN and SMALL GRAINS
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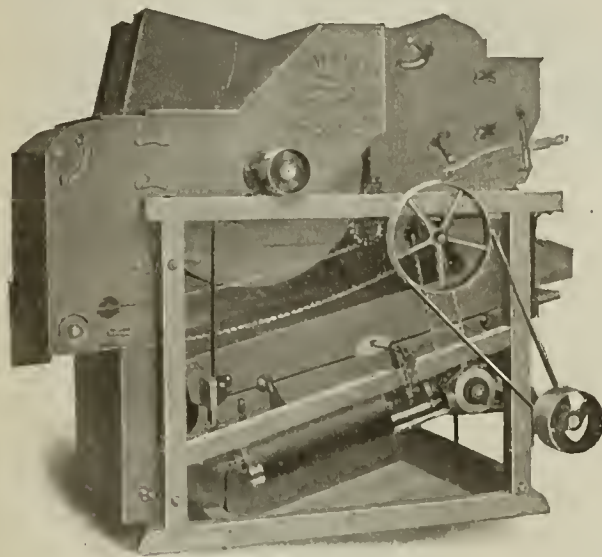


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would install a power plant to run his mill that was capable of developing only half the horsepower required. No indeed.



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HAVE you ever estimated the time and energy used up by workmen running up and down stairs, instead of taking an elevator?

A little observation at the stairway may reveal an unsuspected opportunity for eliminating a big waste of man-power in your mill. The time and energy used in stair climbing a dozen or more times a day per man means that much less productive work.

Without exception mills using Humphrey Elevators obtains a direct and considerable reduction in operating expenses. Besides, increased efficiency is a natural result of the ease with which men can report from floor to floor.

Humphrey Elevator

Note these features—Electric Silent Chain drive; driving mechanism a self-contained, compact unit, enclosed and running in oil bath; Humphrey Patented Automatic Stop; instant control; self operating.

With the complete instructions given, any millwright can install the Humphrey.

Let us show you how this dependable passenger and freight carrier can save you money. Write for full information.

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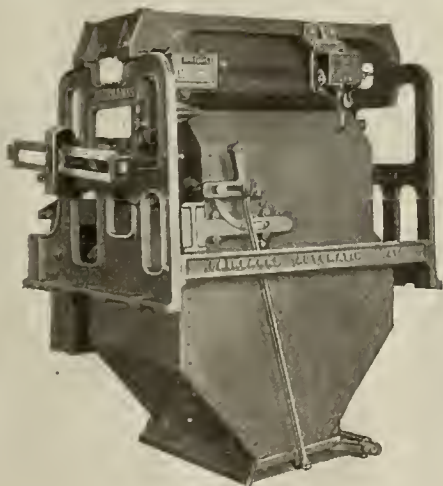
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Automatic Elevator Scale with Visual and Type Registering Counter

A true safeguard in buying and selling grain. Gives accurate record of exact amount of each kind of grain handled. Equipped with two separate counters independently operated—gives a double check on readings. Weighs same weight per discharge on all grains. No weights to change.



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Volume One just hot from the Press. Bill Miller tells how he established a profitable Feed Grinding Business.

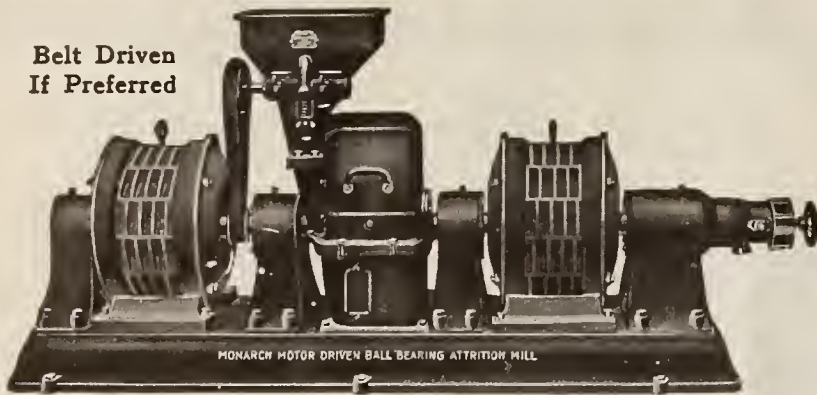
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If Preferred



The Harder the Task, the Greater the Need for a MONARCH Ball Bearing ATTRITION MILL

GIVE the Monarch Ball Bearing Attrition Mill a job of heavy grinding and notice how easily it masters it. There will be no balking, no screeching of bearings, and no intermittent variations of speed.

The Monarch is *built for work*; and the harder the task assigned to it, the more emphatic becomes the proof of its superiority.

Sturdiness of construction and economy of operation—prime essentials of an efficient feed grinder—are features which have helped to gain for the Monarch Ball Bearing Attrition the unqualified approval of feed mill owners and operators in practically every state in the Union, as well as in many foreign countries.

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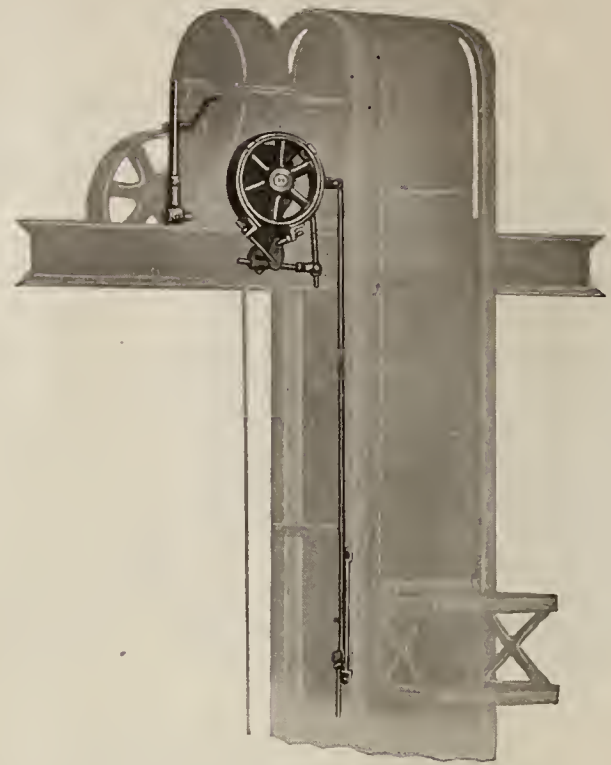
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N. & M. CO. SERVICE ELEVATOR WITH AUTOMATIC SAFETY DEVICE

WITH the upper terminal automatic stop in operation there is no danger of being carried overhead and injured. The weight of the passenger after the top floor is reached automatically throws a lever, shutting off the power and applying the brake, thereby locking the belt and steps against movement in either direction.

The automatic stop mechanism furnished with the Nordyke & Marmon Company service elevator adds the vital feature of safety to the elevator's other excellent qualities of reliability and utility.

Send for Service Elevator Circular.

NORDYKE & MARMON COMPANY

Established 1851

INDIANAPOLIS

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AMERICA'S LEADING MILL BUILDERS



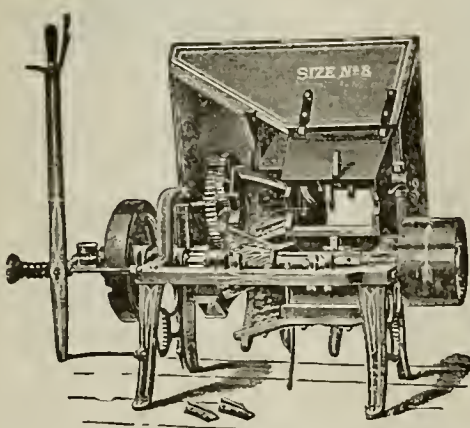
The Day Dust Collecting System

Dust Collectors alone do not prevent explosions in elevators, but Day Dust Collecting Systems do when properly installed.

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THE DAY COMPANY, Minneapolis, Minn.

Make Feed Grinding More Profitable!



Mill opens like this in six minutes

Bowsher's "Combination" Mills do this

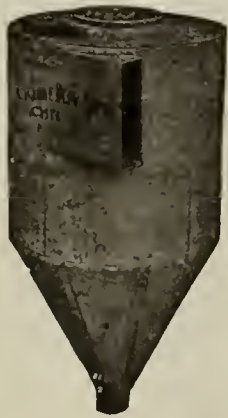
Because their large capacity, cone-shaped grinders and positive self ear feeders are properly designed to direct every ounce of power energy to the actual reduction of the grain.

Crush and Grind ear corn, husked or unhusked, alone or mixed with any kind of small grain in any desired proportion. Reduce the material to any fineness desired for feeding purposes.

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Sold with or without Sacking Elevator.

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A PROFITABLE INVESTMENT



Every elevator owner is operating to disadvantage who is trying to get along without a

Cyclone Dust Collector

Do not delay longer but write today for full particulars on the installation of our system.

CYCLONE BLOW PIPE CO.

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Complete new systems installed on modern plans and guaranteed. Old systems remodeled on modern lines on most economical plans. Supplementary systems added where present systems are outgrown. Defective systems corrected and put in proper working order.

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the finishing touch of the
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SAVE STEPS

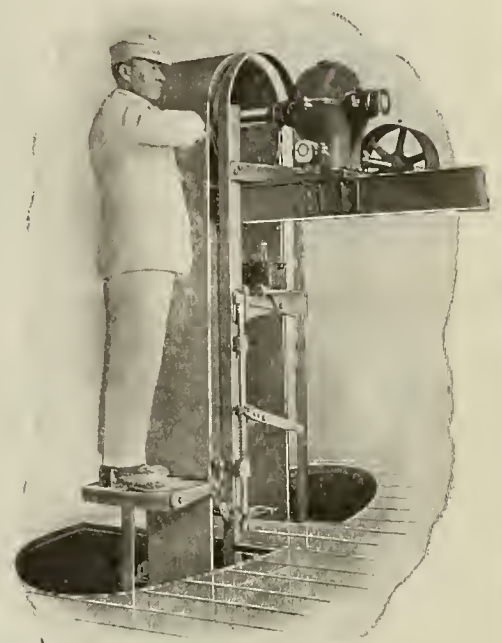
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ENERGY

Give Closer Attention to Each Machine—

By Installing a

WOLF EMPLOYEES ELEVATOR WITH AUTOMATIC SAFETY STOP



Your miller or elevator manager will conserve his energy and look more closely after each machine if he can travel from floor to floor on the elevator. Many trips to the sifter floor, the grain cleaning machinery and the purifiers are now avoided because your miller is compelled to tramp up and down stairs day after day, month after month.



This energy should be made productive by having your miller give closer attention to all details—get better quality, a higher yield and take better care of the entire equipment.

The Wolf Employees Elevator has endless belt with noiseless platform framed in steel. Made in sections. Pivoted roller platform.

The Wolf Automatic Safety Stop is absolutely dependable. Always trips and locks the belt when weight passes the danger zone. Safety device may be attached to any elevator where the platform travels on rollers against uprights supporting the elevator.

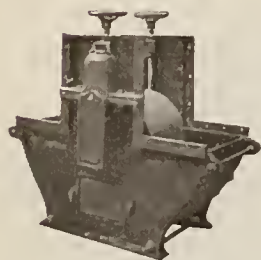
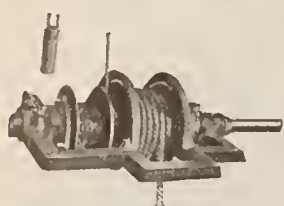
The highest employees elevator in the world is 246 feet high—and it's a Wolf—Send for Bulletin 106-M and learn the construction and big savings from its use.

THE WOLF CO.

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HALF a million dollars worth of well selected stock, constantly maintained, and an organization keyed up to the theory that plant efficiency is measured by the number of orders shipped on the day of receipt, accounts for Caldwell service.

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By MILO S. KETCHUM

Design and construction are covered completely in this book of 556 pages. The new second edition brings it up to the minute with fresh data, new cuts, and a modern treatment throughout. Over 150 pages were added to the old edition. The new chapters on "Reinforced Concrete" and "Methods of Construction and Cost of Retaining Walls" are especially valuable. It is the standard work on stresses due to granular materials.

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ELLIS ROTARY DRIERS & COOLERS

Ball Bearing



If you take pride in your mill equipment the Ellis Rotary Drier will make an instant appeal to you. It is sturdy, clean cut, and will give you unfailing service throughout the year at a surprisingly low upkeep.

The Ellis Drier Co., Roosevelt Road & Talman Ave., Chicago, U. S. A.

Milling Leaders Select Morse Chains for Elevators

New Elevator of the Washburn-Crosby Company at Minneapolis is Equipped Throughout for Economy and Dependability

IN THESE days of good roads no elevator or mill can afford to neglect economies of operation. Competition is too keen. Some of our farmer friends are inclined to discredit such statements, but their attitude is one of tradition rather than being based on present conditions. This is true of the country at large, and it is doubly true of the great flour mills at Minneapolis. In the nature of things a large plant has a greater overhead than a small plant, and yet the large mills must compete with all the local mills in the country in their own territories. As a consequence every process in the mill must be reduced to its lowest economic terms. All unnecessary operating expense must be eliminated or certain failure impends. And these economies begin in the elevator where the raw material is received and held 'till needed. In fact the elevator operation may easily make the difference between black ink and red in the balance sheet.

Perhaps there are millers who know more about such things than the Washburn-Crosby Company, but the successful operation for over half a century certainly gives that company a right to be heard.

When the new 3,500,000-bushel elevator was built a few years ago, James Stewart & Co., who had the contract for designing and building the structure, were given strict injunctions to leave no loophole for operating leaks. This was a large order, for grain is carried many miles through an elevator during an average day's run and there are ample opportunities for the waste of material, time or power. The utmost resources of the engineering firm's knowledge and ingenuity were called upon, and the result was a house that answered the exacting requirements of the milling firm. In normal times the Washburn-Crosby Company grinds 167,850 bushels of grain a day, or at least its mills have a capacity for grinding that amount. This grain has to be delivered when and where it is needed, and there must be no failure in this service.

Considering the importance of this phase of the elevator's part in the mill operation, it is certainly significant that Morse Silent Chain Drives were selected for the primary transmission throughout the house. From practically all of the Allis-Chalmers Motors, Morse Silent Chains carry the power to machine, main shaft or countershaft, as the case may be. There are 27 Morse Drives, delivering a total of 735 horsepower in every unit of the house.

The problem of certainty in performance was thus solved, but the solution did not come by guess or by rule of thumb. There were many angles to be considered in the selection, although dependability was the most important. Economy of operation was given almost as much attention. The power factor of a plant is not the amount developed by the prime mover, but that which is delivered to the machinery. Power is not a theory, it is an energized fact. Therefore it is essential that there be a minimum of waste between the power developed and the energy ex-

ended in the work performed by the machines. Waste in this department has three distinct sources: Excessive first cost; inefficiency of performance; unnecessary repair and replacement. The first cost cannot be judged arbitrarily, for the other two factors enter into the equation. An



MORSE CHAIN DRIVE IN WASHBURN-CROSBY ELEVATOR

inefficient transmission service is not cheap at any price; nor is one which needs frequent repair. A high priced equipment is often the cheapest; and in the matter of price the Morse Drive bears comparison with any transmission mechanism, for the price is moderate and the cost very cheap.

Here, then, are ample reasons for the selection of Morse Chain Drives in the Washburn-

resultant loss of power and excessive depreciation such as belts are subjected to; nor is there the unpleasant rattle that always accompanies gear installation. The scarcely audible hum of a chain drive, a steady, sustained tone, is symbolic of the power, the dependability, and all around efficiency of the Morse Silent Chain Drive.

The long career of the Washburn-Crosby Company has shown a remarkable efficiency in manufacturing, distribution, advertising, and in its office management. The firm has always kept a close record of every department and every machine in its plant. It knows what each one can do, and has learned what can be expected of every unit. The selection of Morse Chain Drives in the new elevator was the result of a careful study of experience in transmission.

There are few manufacturing plants that have as great a variety of power application as a flour mill. The units vary from a fraction of a horsepower up to several hundred, and the distance between centers from a few inches to many yards. From the days when the first Washburn "A" Mill consisted of 40 run of stone, almost every known transmission has been given a thorough test. Each one has been scrutinized for its good and bad features before it was discarded or continued in a different service or considered a part of the permanent installation.

The effectiveness of the Morse Drive proved itself quickly when installed years ago in the Washburn plant, and so when the new elevator was built, the Morse Chain Company of Ithaca, N. Y., felt gratified that its chain transmission should be selected without question or argument. The company is best pleased when experience can guide a prospective customer. The labor of making a sale is practically eliminated, for in cases of this kind experience is the best possible salesman.

While the grain elevator business is closely connected with milling, the service called upon for power transmission is quite different. The testimony of a mill, therefore, might be somewhat discounted by an elevator operator, if it were not supplemented by the experience of countless elevators of every size, and operating under every possible condition. Small country elevators, transfer houses, and some of the largest terminals have installed Morse Chain Drives after a careful study of its performance under the peculiar conditions of each separate locality.

In Minneapolis the dry air is particularly favorable to other transmissions, as dampness or marked change in humidity entails losses by most driving installations and these conditions are absent in the Northwest. But even there the qualities that have made Morse Chain Drives "standard" with many of the leading engineers of the world, were so pronouncedly favorable that this thor-

oughly modern plant is equipped from basement tunnels to elevator head, from receiving conveyor to conveyors to milling bins with Morse Silent Chain Drives, the transmission that "produces more with less."—Advertisement.



WASHBURN-CROSBY ELEVATOR AT MINNEAPOLIS

Crosby Elevator. But there was much more besides. On the one hand the chain drive has all the flexibility of the belt or rope and can be operated successfully on very much shorter centers than either of the others, which, in a great many positions in the average elevator, is a distinct advantage. On the other hand the chains are as positive as gears; there is no slip nor creep with the

ENGINEERS PLANNING POWER TRANSMISSIONS

Secure Data and Estimates of "MORSE" DRIVES. SAVE Construction, Space, Light, Fuel. Producing More With Less.

MORSE CHAIN CO.

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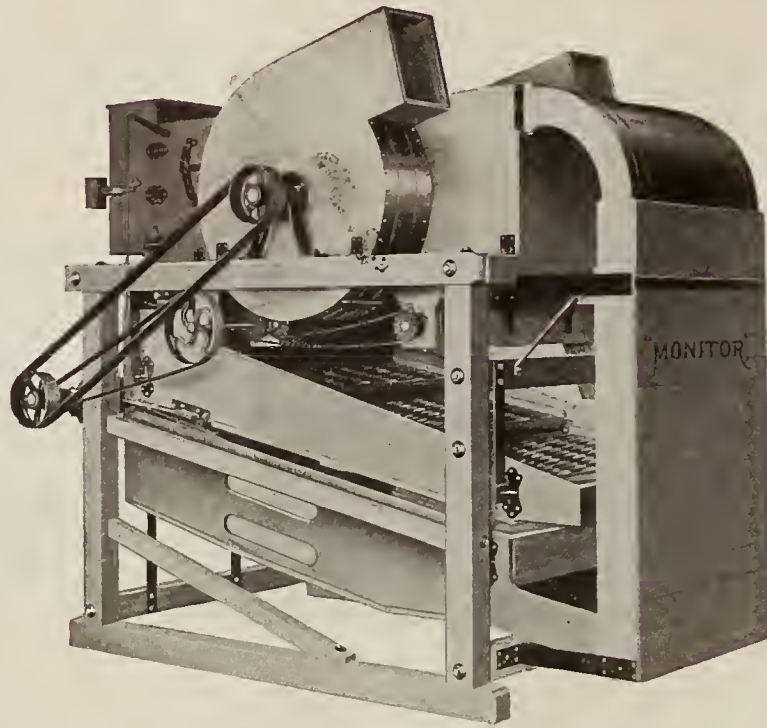
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ITHACA, N. Y.



A Combined Cleaner of Merit

The MONITOR Combined Corn and Small Grain Cleaner is very popular among the elevators in the field, taking in grain from the growers.

More of this class of elevators every year are adopting it.

Of course, they have a reason for it—in fact, several reasons.

It gives them a cleaner for all kinds of grain—saves valuable floor space, cost of installation, leaves the screens always in the machine ready for the grain to be cleaned, saving delay in changing from one grain to the other and does high grade cleaning.

It has overcome the former necessity of having one cleaner for the corn and cob mixed from the sheller and another for other grains.

This means dollars saved—in investment—in installation—in operation.

All of these advantages have to do with your profits. Why not benefit by them. There is no other cleaner that will earn you money as will the MONITOR.

It Saves You Money in First Cost

Canadian Plant,
Huntley Mfg. Co., Ltd.
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HUNTLEY MFG. CO.
DEPARTMENT E
SILVER CREEK, N. Y.

(In writing, mention department)

A monthly journal
devoted to the elevator
and grain interests.

Official paper of the
Grain Dealers' National
Association and of the
Illinois Grain Dealers'
Association.

Established in 1882.



Published on the fif-
teenth of each month by
Mitchell Bros. Publishing
Co., 431 So. Dearborn St.,
Chicago, Ill.

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per year.

English and Foreign
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year.

Established in 1882.

VOL. XL

CHICAGO, ILLINOIS, JANUARY 15, 1922.

NO. 7

Restoring the Chicago & Northwestern Elevator

The Great Chicago Plant Operated by the Armour Grain Company and Partially Destroyed by Dust Explosion, Now Nearing a Condition where Operation can be Resumed

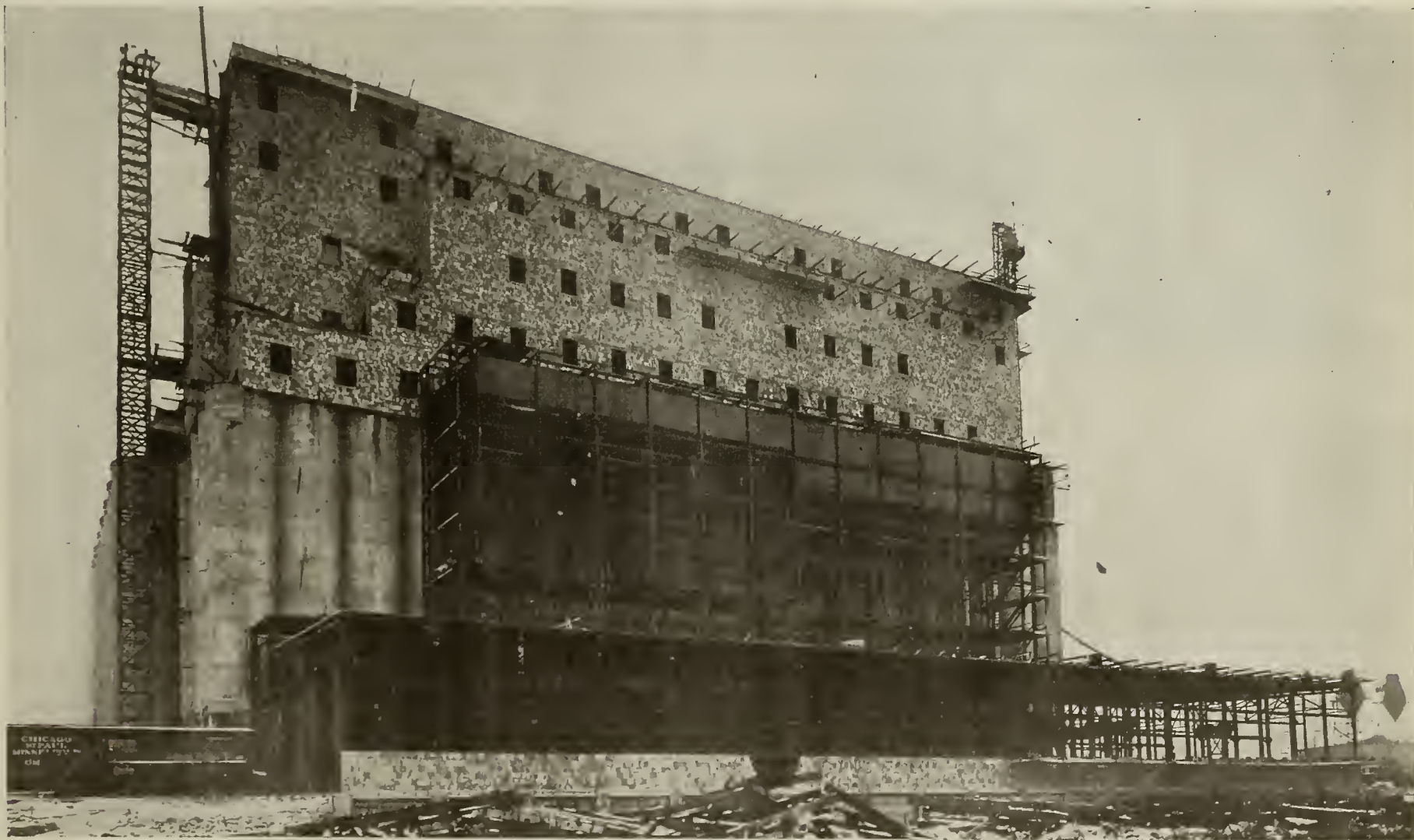
BEFORE the Government experts had more than concluded their investigation of the terrific dust explosion which last spring wrecked the Chicago & Northwest Elevator, operated by the Armour Grain Company at Chicago, the engineers of the John S. Metcalf Company were drawing up their plans for the complete rehabilitation of the mammoth plant. It was an engineering prob-

destroyed; about a third of the river house; the tunnels, galleries, cupola, legs and spouting.

The contract for the reconstruction was given to the Witherspoon-Englar Company and the work is being rushed as fast as possible. At present the office building, power house, shop building and welfare building are completely restored; the debris is cleared away; the working house is in such

structure of the working house is of tile construction instead of the concrete of first instance. In fact tile will be used largely in all the upper workings of the elevator, including the river house, upon which work has scarcely been started.

The only important structural change in the plan is in the head house over the drier building. The two large legs serving the driers and the four



CHICAGO & NORTHWESTERN ELEVATOR AT CHICAGO IN PROCESS OF RESTORATION

lem of the first order, for the damage extended throughout the entire plant, in some places requiring complete rebuilding and in others only minor repairs. There were a few, but not many changes in construction, and to all intents and purposes the building will be like new. The experience which the Armour Grain Company had had, however, suggested several changes in equipment, and these were incorporated in the new plans.

The principal points where new construction was required included the 16 storage tanks in the southeast corner of the plant which had been entirely

shape that grain can be received within 60 days; and legs, spouting, and equipment are in process of installation. As the working house is the heart of the structure, work is now largely concentrated on that part of the plant so that operation can be resumed while the demolished bins are being restored. All the bins which sustained less injury will be ready when the work house is finished, and the new bins will be rushed to completion for the new crop.

The steel train shed which was completely wrecked is now ready for operation. The super-

smaller legs that handle the grain from them were lengthened so that the latter could discharge into the scale hoppers. This added a story to the drier headhouse. Incidentally, four new Reliance Scales made by the Stearns Motor Company of Ludington, Mich., and of very large capacity, were installed. A different layout was also made for the screw conveyor serving the clippers and cleaners. All of the conveying machinery was furnished by the Webster Manufacturing Company.

The machinery installation in the cupola of the working house has been materially changed. The

new outfit consists of six Invincible Needle Separators; four 48-inch Richardson Separators; and four 2-high Carter Disc Separators. Instead of four No. 15 and six No. 11 Monitor Separators, the plant will have 10 No. 11, Style C Monitors for wheat and two No. 11, Style B, for barley. The 20 No. 11 Monitor Oat Clippers remain as they were.

Material changes are also being made in the drier house. The new installation consists of six Ellis Driers and six Hess Driers. The new leg arrangement will enable the grain to be weighed both before and after drying.

Perhaps the greatest innovation of all in the rebuilt structure is the installation of a complete vacuum dust collecting system with convenient openings in every part of the house so that when dust is removed from walls, floors and ledges it is not merely brushed off and suspended in the air, inviting another explosion, but is carried to the dust house where it belongs and where it is innocuous. This system was installed by the B. F. Sturtevant Company. The system offers a field for efficient cleaning of elevators which undoubtedly commends itself to the fire underwriters.

This, of course, is entirely separate from the regular dust collecting system which has been extended and amplified. Suction will be applied to each of the 38 leg boots at the discharge end of most of the conveyors. This will make a material difference in the dust released in the house, and is

white background, such as a white sack or large piece of paper, the weevil can readily be seen and the severity of the infestation approximated."

A GLEANER HOUSE IN OHIO

According to the established policy of the Gleaner Clearing House Association, new elevators are built only "where there is a proven, justified need for them. Whenever the farmers in any locality desire to establish a Gleaner Elevator, a scientific investigation is made to determine definitely whether it can be made a success. Trade conditions, not only in reference to that locality, but in connection with the surrounding territory are carefully analyzed, the matter of financing is thoroughly investigated to make sure that sufficient capital can be raised to successfully operate the elevator, railroad facilities are fully gone into and a number of other things necessary for the successful operation of an elevator are fully considered. This investigation is performed by trained men from the central organization. A local Gleaner elevator will not be established where it is not needed."

The farmers organization known as the "Gleaners" was established in 1894. The Gleaner Clearing House Association was organized under the general corporation laws of Michigan in 1908, with an authorized capital of \$40,000. It has since been

They have every hope of an outstanding success in their venture and are enthusiastic over the outlook. From the standpoint of volume the prospects are indeed good for Ohio production for next year is unusually promising.

PROPORTIONATE EXPORTS OF WHEAT AND FLOUR

The Flour and Wheat Statistical Department of the First National Bank of St. Louis, in charge of Bert H. Lang, former vice-president of the Grain Corporation, is putting out some valuable statistical information for millers and grain dealers in the bulletin service Mr. Lang has inaugurated.

We take the following statistics from their latest Soil Products Bulletin:

Wheat Crop and Exports of the United States (000 omitted)

Year	Exports Wheat and Flour Bushels	Share of Exports in form of Wheat	Share of Exports in form of Flour
1880-1890, incl. (average)	124,758	65.93	34.07
1891-1895, incl. (average)	170,744	59.50	40.50
1896-1900, incl. (average)	197,427	59.03	40.97
1901-1904, incl. (average)	150,630	55.06	44.94
1905	97,609	35.85	64.15
1906	146,700	52.38	47.62
1907	163,043	61.63	38.37
1908	114,268	58.57	41.43
1909	87,364	53.50	46.50
1910	69,312	34.24	65.76
1911	79,689	37.85	62.15
1912	142,880	64.11	35.89
1913	145,590	63.65	36.35
1914	332,465	78.11	21.89
1915	243,117	71.33	28.67
1916	203,574	73.60	26.40
1917	132,580	26.25	73.75
1918	287,438	62.20	37.80
1919	219,881	55.69	44.31
1920	307,623	67.70	32.30

FARMING IN 1922

When asked for a statement on the prospects of the farmer in 1922, Secretary of Agriculture Wallace said that no man whose opinion is worth considering would care to make any hard and fast prophecies. He added, however, that there are signs which indicate that the coming year should be a better one for the farmer and for those who deal with him than was 1921. Among these hopeful signs he mentioned the following:

Credit conditions are better both through regular channels and through the special agencies created to meet the farmer's needs. Interest rates also are softening.

Reductions already made in freight rates on farm products lighten by that much the transportation burden which the farmer has been carrying.

Cost of producing farm crops will be lower relatively in 1922 than in 1921.

Very likely there will be a reduction in the acreage of some of the grains of which we now have such a large surplus, and this should tend toward better prices.

The paralyzing effect of the sudden drop in prices last year is wearing off, and farmers will enter the new year more hopefully, believing that the worst is over.

Congress has indicated a willingness to enact such legislation as promises to be helpful.

Farmers are coming to see more clearly that the task of putting farming on a sound business basis is really up to them and that through organization they can reduce marketing costs. In this they will have increasing help from the Department of Agriculture and the various state agricultural colleges which now see better than before that they must give the farmer the same sort of help in the marketing of his crops that they have been giving him in the production.

In the industrial and financial centers there is



PLANT OF THE GLEANER CLEARING HOUSE ASSOCIATION, MALINTA, OHIO

in conformity to the recommendation of the Government engineers who studied the dust explosion. There were recommendations also in regard to the lights and these will be followed as far as possible. If science and experience can prevent it, there will not be a repetition of the disaster which occurred on March 19 of last year.

It may be that the removal of so much dust from the moving grain will be in the nature of an experiment. It has always been claimed that the weight of the dust just about represented the profit in handling grains through an elevator, and the generous suction which is to be applied in the rebuilt house may prove to an expensive proposition. But the Armour Grain Company is going to give it a thorough test and should it prove workable, it will make a great difference in the hazard hitherto thought to be inseparable from terminal elevators.

DETECTING WEEVIL IN WHEAT

O. L. Ford, extension entomologist of the South Dakota State College, suggests a simple way for detecting weevil in wheat and estimating the amount. His instructions are as follows:

"Replace the bottom of a shallow box by tacking on a piece of ordinary 12-mesh window screening. This makes a serviceable hand grain sieve. The 12-mesh screen is too small to allow the grain to pass through but large enough for free passage of the weevil. By screening the foreign matter from a sample of several quarts of grain onto a

increased five fold. The organization is one of the most conservative of the co-operative societies and had a good membership around Malinta, Ohio, when the call came for a Gleaner's Elevator at that point. After due investigation a local Clearing House Association was organized and a 20,000-bushel wooden, modern, iron clad house was constructed.

The elevator has 16 bins, 10 of 1,200 bushels each, and six of 1,400 bushels. The receiving capacity is 5,000 bushels per day and the same amount of grain can be spouted direct to cars on the Toledo, St. Louis & Western Railroad, a side-track of which road parallels the house. This is ample capacity and ample binnage for the community. Wheat, oats, rye and corn are handled through the house, but 16 bins give plenty of leeway for the necessary grade separations. The flexibility of the house can be imagined from the fact that there are nine conveyor belts with an aggregate length of 350 feet.

The cleaning capacity of the elevator is 600 bushels per hour on a clipper cleaner. In addition the house is equipped with a 500-bushel Great Western Corn Sheller; two self-cleaning hopper bottom wagon dumps; three Fairbanks-Morse Scales; and a 25-horsepower gas engine which transmits by belt throughout the house.

The Gleaner's Elevator is carefully managed, and naturally the patrons of the house have a personal interest in it and make the commodious office of the plant their headquarters when in town.

coming to be a better understanding of the important part the farmer plays in our general economic scheme, and consequently a decidedly more intelligent and sympathetic attitude toward him and his problems.

With prices of farm products falling and the future very uncertain, even those farmers who had money laid by—and there are a large number of such—have been restricting their buying to what they had to have. Now with the growing belief that prices have hit bottom, buying will be resumed and should increase in volume, and manufacturers and retailers who make or sell things that farmers need or want should have better business this coming year.

Everything considered, therefore, we can enter the new year in a spirit of hopefulness and good cheer. I see nothing which indicates boom times for the farmer in the near future, but there does seem to be promise of better times both for the farmer and for those whose business is largely dependent upon him.

IMPORTANT DEVELOPMENTS IN NORTHWEST

BY MEL WHARTON

The year 1921 witnessed the breaking of every previously existing record for shipment of export wheat and flour out of Portland, Ore. The year which has just ended also witnessed the greatest prosperity in port development and total water shipments in its history and the fact of this epochal achievement is attributed directly to the vastly stimulated shipment of wheat and flour through the port. When a complete tabulation of exports for the year 1921 is completed it will show a total valuation of approximately \$67,000,000. An idea of the tremendous part played by wheat and flour shipments in this total is gathered from the valuation of \$53,611,257 placed upon wheat and flour alone.

One of the most momentous questions concerning the water transportation of wheat on the Pacific Coast, the ship-hold lining, is now under consideration to determine whether the custom which has been in vogue ever since wheat has been shipped from the Western Coast will be abandoned. Many wheat shippers and steamship operators are of the decided opinion that lining, especially the heavy and costly timber lining that is required for some vessels, is unnecessary and merely an added expense. The cost of such lining often runs well into the thousands of dollars for each vessel so fitted. Most of the marine underwriters contend that lining is absolutely essential and refuse to insure any vessel leaving port without the specified lining. Consequently the entire matter is now up for consideration before the British Board of Marine Underwriters in London, England. The outcome is expected to be final.

Even if modified lining be the outcome of the conference at London, it is hoped that a uniform set of regulations governing ship lining for grain carrying will be adopted, for it is declared that lack of definite rules in this respect now seriously hampers the trade on the Pacific Coast and unquestionably places unnecessary financial burden upon shippers. In order to prepare a vessel on the Pacific Coast for carrying bulk wheat, the holds must now be lined with two inch planks, cleated, stayed with four by four inch braces and carpeted on the bottom with burlap, admittedly an expensive operation. Frequently certain vessels require upwards of 100,000 feet of fir for lining and often 30 men work for several days to complete the specified requirements. Usually the lumber is salvaged at the end of each voyage by being sold at the port of call and thus a considerable part of the initial cost of lining is saved.

A feature of the carrying trade during 1922 has been the entry of the Japanese fleets of merchantmen into the field and the Nipponese have practically dominated the wheat sea borne transportation commerce during the last six months. Competent authorities assert that the day of the sacked shipment of wheat in the Pacific Northwest

is past and if 1921 is a criterion, they are correct. Not least among considerations cited by grain growers is the substantial saving made in not having to purchase burlap sacks.

Slowly but surely the bulk method of shipping wheat is gaining precedent over the time honored Pacific Northwest custom of shipping sacked grain. The movement of bulk wheat was given a tremendous impetus by the entry of the Gray-Rosenbaum Grain Company into the shipping field at Portland, virtually all of the grain transported by this concern via water going in bulk. The Gray-Rosenbaum interests invaded the Pacific Northwest field the fall of 1921 and the last few months have wit-



LOADING THE S.S. "TORREY" IN EIGHT HOURS

nessed the greatest movement of water-borne wheat from the Columbia River in its entire history. Steamers working bulk grain and steamers storing sacked cereals were frequently loaded side by side. But, nevertheless, the bulk shipment method is gradually superseding shipment in sacks and certain operators assert that within a few years practically the whole movement of offshore grain from the Pacific Northwest will be in bulk.

Until a few years ago the wheat raisers adjacent to the Portland export territory were inclined



LOADING SACKS OF GRAIN FOR EXPORT
Note the great number of men required compared with bulk method

to favor the shipment of their crops in burlap sacks, manifestly an expensive method. During the last three years, however, a decided sentiment has arisen in favor of the bulk method of grain handling. This sentiment is due in part to the general use of community elevators in the Pacific Northwest by ranchers who prevailed upon the cities of Seattle, Tacoma and Portland to build terminal elevators to take care of their crops in bulk. These three cities complied with the request of the wheat growers and have since had no occasion to regret the conveniences established.

The enormous shipment of wheat through the Columbia River gave ample opportunity to witness the capacity operation of the newly built 1,000,000-bushel municipal grain elevator at terminal No. 4, Portland. The loading apparatus lived up to all claims made for it and officials were exceedingly well pleased with its action. What is thought to approach a world's record in bulk loading of wheat into the hold of a steamer was accomplished re-

cently when 158,000 bushels were transferred from the elevator into the hatches of the Norwegian steamer *Torrey* in the short space of eight hours. This vessel also has the distinction of carrying the first cargo of bulk wheat across the Pacific Ocean, her consignment being the Orient. An additional transfer belt is being installed at the elevator which will enable it to handle grain more speedily than at present and will make the Portland terminal one of the fastest grain handling ports in the United States according to Chief Engineer G. B. Hegardt of the Portland Public Dock Commission.

While its first year of operation did not see the use that was expected of Portland's municipal elevator, the year just passed has seen it operating to its limit. From an exportation of 11,587,275 bushels in 1920, the figures jumped to 36,918,330 bushels in 1921.

For the past 40 years the wheat shipped through the Rose City to offshore points has been exported under the standards set by the Portland Chamber of Commerce. The question of whether the Federal grain regulations or those of the Chamber shall prevail is now up for decision at Washington, D. C., and wheat and other grains shipped through the Columbia River will be subject to the rulings made at Washington. Grain exporters at Portland, with the exception of the Japanese, are as one in favoring the Chamber standards but the farm bureaus and Oregon experimental stations are opposed. Charles Merrill of the Department of Agriculture declared that Portland's basis lowered the value of the Northwestern grain crop. Whatever is determined at Washington will henceforth be regulations for the Columbia River grain shippers.

TO STUDY GRAIN SORGHUMS

The distinguishing characteristics determining the difference between classes, subclasses, and varieties of the grain sorghums are not as thoroughly understood by many grain inspectors and members of the grain trade as are the characteristics distinguishing the other grains, particularly of wheat, corn, and oats. In order to prevent confusion and misgrading by the grain inspectors and others responsible for the correct application of the grain sorghum grades, a grain sorghum school was opened in November of this year, at the general field headquarters of Federal Grain Supervision at Chicago by the United States Department of Agriculture. The school is being conducted by a grain sorghum specialist, B. E. Rothgeb, who is in charge of the grain sorghum standardization investigations of the Department, which have been under way for some time.

The school consists of an intensive study of the grain sorghums and of the tentative standards for this grain, particular emphasis being placed on the characteristics which distinguish the classes, subclasses, and varieties. The first class included the chief grain inspectors of the three most important grain sorghum markets in the United States, and several Federal grain supervisors, four of whom are in charge of district offices of Federal grain supervision. The members of the first class were so enthusiastic over the work of the school that on going back to their respective stations they induced not only four grain inspectors to attend the second class, but also some of the grain sorghum dealers who are frequently called upon to exercise their judgment of the sorghum grades in their transactions.

The Department of Agriculture has practically completed its grain sorghum standardization investigations, which have been conducted with a view to securing data upon which to base official standards for this grain. Tentative grades, based upon the results of the investigations, were prepared during the past summer and were submitted to the various members of the grain trade and to the grain inspection departments most directly interested in the grading of grain sorghums. The tentative grades were adopted and made effective by two state grain inspection departments and by the inspection departments of several independent grain exchanges located in the Southwest.

Pioneer Feed Plant for Alfalfa Products

M. C. Peters Mill Company of Omaha Develops Feeds With Original Ingredients and Prepared on Novel Machines

THE making of alfalfa hay into meal was primarily considered by the inventor because of the annual shortage of bran as a laxative for stock and the usefulness of alfalfa was appealing because of its higher protein value and its succulent, appetizing quality. The other reason was the reduction of the bulk of the alfalfa into more concentrated form that lower freight rates in transportation might be applied.

That the industry has had its ups and downs is most apparent in the long trail of failures in badly selected locations, but its fortunes are apparent in the size of the truly substantial institutions which have been raised by this industry to powerful commercial positions. The main plant of the M. C. Peters Company at Omaha, Neb., was not outlined for beauty, but was adapted more to safety and strength and for handling bulky products.

Alfalfa is about as bulky as anything that can be imagined. In its concentration the inventors have been keen to preserve the leaf, as the leaf is the color, and in the mind of the originator, M. C.

tory for it gave to the mixed ration the very best green color necessary to attract the eye of the purchaser and the palate of the animals fed.

The physical details of the Peters' patented Alfalfa Cutter consist of a heavy cylinder mounted in a frame that in total weighs 14,000 pounds. This cylinder carries a series of special knives and revolves at slow speed with a long sweep against a steel bar with a scissors-like action, the inventor's contention being that a hammer, operating on a suspended fabric, requires speed and weight for reduction, but the same fabric thrown in the air and cut with the scissors is very easily reduced. An automatic feeder to press the alfalfa against the knives weighs 4,000 pounds extra. Total machine weighs 18,000 pounds.

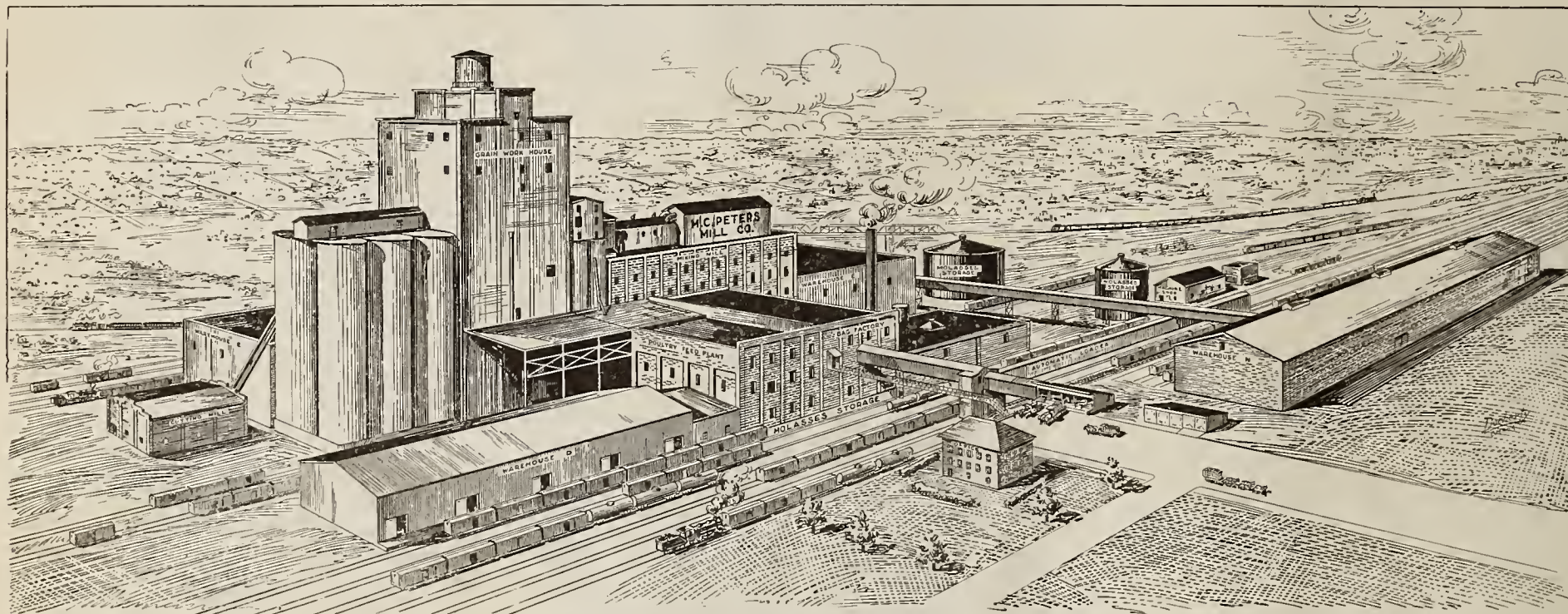
The cut particles of the alfalfa fall into conveyors for ventilation and delivery to the packers in the branch mills, and with the addition of air service when necessary in the mixing mills.

A thoroughly developed dust system in the Peters' Mill carries such escaped particles back into the

one obstacle after another was conquered, the Peters' Mill in its original plant finally had 11 buildings of frame or brick type. In 1909, due to sparks from an engine, the old plant was entirely destroyed by fire. With the acquired knowledge of the growing necessities of the business, the M. C. Peters Mill Company set forth to build a fireproof plant of most modern type and its plans were fixed for the future by additional land. This land was divided up for trackage and 17 tracks laid with spaces between for the buildings, planning ahead for as much future business as could possibly be handled by the institution.

Set among these tracks are various buildings of the most modern, fireproof type, and fully sprinklered. On the west side is a large receiving warehouse, steel beams, concrete floor, iron sides and roof, a warehouse of 3,000 tons' capacity, calculated for the storage of alfalfa meal manufactured in the western branches or the surplus produced in the Omaha mill. This building is equipped with automatic piling machines, which the company constructs, automatic belt carriers for easy and economic distribution of the sacked meal.

In an annex to this warehouse are the packers for handling that surplus of meal which is above the requirements of the mixed feed department. This warehouse is reached by inbound and out-



PLANT OF THE M. C. PETERS MILL COMPANY, OMAHA, NEB.

Peters, the main point was to keep that leaf in a flaky form, if possible, not only for the preservation of the color, but for the succulence and taste it has in that form. In the M. C. Peters Mill Company Cutting Machine, therefore, there is perfection in product, for the leaf is saved and the material is reduced most skillfully by machines operating with a very slow speed of 400 R.P.M., whereas usual reduction is made with speeds above 1,000 R.P.M.

M. C. Peters first considered the reduction of alfalfa into a concentrated form in the fall of 1902 and conducted his experiments and operations under the name of the Lucern Products Company, incorporating in 1906 as the M. C. Peters Mill Company, headquarters, Omaha, Neb.

During this experimental period every form of crushing, pulverizing, cutting and grinding invention was experimented with in some form or other to produce a meal economically. In the inception there was no thought of much except the concentration, but it soon developed that a stringy, fibrous, dusty product would not meet the needs of the consumer as acceptably as a quality as free from dust as possible and containing the leaf to preserve the color and protein. Continuous experiments finally culminated in a Peters' Cutter operated at the low speed of 400 R.P.M., powerful in its wide sweep, cutting 10 tons per hour with one-tenth the horsepower of the original machine, providing a quality that now thoroughly satisfies all market requirements.

The invention of the Peters' Cutter marked his-

feeds so there is absolutely no loss in the mixing mill of any portion of the raw material.

To lay the dust, add succulence and palatability the inventor's mind turned to various ingredients and found that the high protein, oily feeds were high priced and for balancing rations could only be used in measured amounts. Beet molasses at that time was wasted into mountain streams to which objections were raised and the inventor discovered that this molasses could be bought very cheap and transported in tank cars, that the molasses was of a quality rich with sugar for which there was no economical extraction process and that the protein effect of this sugar with its palatability and growth invigorating properties made the mixture very attractive in quality and cost; hence, alfalfa meal and molasses mixtures known as "Peters' Alfalfa Sugar Meal" were thrust on the market in 1904.

It was quickly discovered that in the barns and private stables consumers did not want the bother of making their own mixtures and the mill was compelled to add facilities for combining other ingredients with the alfalfa and molasses. It naturally followed that in the growth of the business more warehouses were needed for alfalfa storage, tanks, drainage and pumping systems for molasses, elevator storage and handling equipment for various grains and room for bags, mill supplies, sacked products for mixing, steps in the march of progress which required efficiency in development, knowledge in combination, money and nerve.

In the various processes and additions whereby

bound trackage, with an overhead carrier to take any surplus from cars distant 500 feet and interchangeable belt carrier leading from a warehouse 600 feet distant from which the mixing systems may be supplied with raw material should an emergency exist.

Next to this large warehouse is the alfalfa meal cutting plant wherein there are two of the 10-ton Peters' Type Alfalfa Meal Cutters of the very latest model.

South of this cutting mill is another extensive warehouse for surplus when the alfalfa hay receipts are heavy. Also leading to the cutting mill underground from distant tracks is a chute with a speedy carrier, leading also from another warehouse so the alfalfa hay supply may be gathered from four tracks on the west side or from three tracks on the east side.

Adjoining the cutting mill and warehouse is the large mixing mill which contains primarily the entire Peters' process of feed production. In this five story, brick structure, with its concrete floors and steel beams, a sprinklered risk, the very latest type of mechanism is employed for the conversion of corn into the products required for mixed feeds, the handling of mixed grains and cut alfalfa and the molasses mixing process. Peters' Alfalfa Mixer was designed by M. C. Peters individually and is considered by its owners in a class beyond comparison or criticism.

The process of making "Arab Feed," for instance, is simple, but the details are attended with extreme

care. When the various ingredients have reached the mixer in their proper proportions and weight and the final product passes into a special machine constructed for the purpose, the product is dropped automatically into an ingeniously devised system whereby the scaled package is uniformly passed into the hands of five workmen, who are kept diligently busy in handling the packages into the gravity chute which leads to a long transporting belt, carrying the finished product to the outer system of tracks which are away from the incoming tracks and housed against weather damage.

This outbound loading device is in itself a revelation of modern quick loading. The first belt leads to a cross belt, which receives the package and dumps it into any car at the will of the operator. As the housed loading chute is paralleled by a set of tracks on each side, there is always room for 12 cars to be loaded out and 12 empties back of these cars to run in to load as soon as the preceding cars are filled. In consequence, there is outbound loading capacity equal to output of mill.

Next to the mixing mill is a complete drier plant and the extra machinery for handling the grain for milling; this grain having been previously cleaned in the adjoining elevator, which is of modern type, built in 1918, complete with the most perfect unloading and weighing, cleaning and transferring machinery. This building is 160 feet high, is powerfully pillared and posted in concrete. Neither pains nor expense were spared in the construction. It

ing room where the products all having been automatically scaled and likewise weighed out are sacked and dropped on belt carriers, which transport the finished article into the cars on either side of the tracks or to the main loading chute on the housed tracks or by another carrier to the wagons on the streets whereby a few men are able to handle a large tonnage with the utmost economy.

Above the poultry feed finishing room is a small office for the mill office force and the lunch service room for the operating mills.

In the adjoining building is the fireproof bag factory built of brick, steel and concrete. The lower floor is storage for burlap goods in the yard. Burlap bolts when open from the bale are sewed together, run through a finishing machine and wound into large rolls. They are then cut into bags on a machine invented by M. C. Peters, then sent to the manufacturing room where the folded sheets are sewed on the side and bottom and turned on another machine devised by M. C. Peters, pressed into flat form and then passed to the printing machine where the celebrated brands of this mill are stamped in legible, clear form for the instruction of the buying consumer.

Under the manufacturing room is the department for cleaning the bags which have carried the alfalfa meal from the branch mills to the Omaha plant for mixing. After cleaning, these bags are run into a baling press and reshipped to the western mills. The surplus bags made at the bag fac-

The blue roan saddle mare, Twilight Blue, winning two blue ribbons at the International, Chicago, and Des Moines Fairs in the walk, trot saddle classes, with her prize winning stable mates, fittingly established the reputation of the Peters' Stables in the most remarkable achievements ever made in the first year history of a novice stable. Mr. Peters' motto is "Whatever is done must be done best."

No feed is put out by the M. C. Peters Mill Company unless it has been used in actual and practical experiments. The formula of the Peters' "Arab" Horse Feed, for instance, has not been changed in a fractional per cent during the 17 years of the company's history and this fact is vouched for, not only by the mill, but by consumers. Even during the war period when corn was far above



M. C. PETERS MILL COMPANY'S PRIZE WINNING BELGIANS

is crowned with a water tank for fire protection and distributes the surplus storage grain into six storage tanks, the total capacity of grain being about 250,000 bushels. All the machinery is motor operated, each machine where possible being direct motor connected and in many of the departments there are double motors for emergency use in case one motor is inoperative.

Separating this main plant from the balance are two long tracks used principally for grain unloading and reloading.

On the north of the mixing mill is an extra storage warehouse built of steel, and iron clad, and adjoining is the third molasses tank of 2,500 tons capacity, and a building utilized for extra and auxiliary molasses pumping for emergencies, the whole plant being doubly prepared for instant extra service operation whenever there is the slightest fault with any one branch of the operating service of any department.

East of the main buildings on the south is the long warehouse for alfalfa and alfalfa meal storage, with belted carriers leading under the tracks to the alfalfa cutters, or above the tracks to the cars with automatic piling device equipment for loading direct to cars from either side. In an annex of this building is the main carrier from the cars to the alfalfa cutters, with a sorting room for holding from cars all alfalfa not up to grade; also a device for handling bale wires, converting them into marketable use.

The next building adjoining on the north is a concrete, fireproof, gravity molasses tank to which the molasses from the proper tracks glides without the necessity of applied power.

Above the molasses tank is the poultry feed finish-

tory are sold to western trade, forming an interesting link in this manufacturing chain.

The second floor of the bag factory is used for surplus storage of yardage and the multitude of various size bags used in the poultry feed department.

Adjoining the bag factory in the boiler house which supplies the steam heat through the plant, an artesian well and pump and service lunch room for the mechanics; also a thoroughly equipped machine shop, the structure being brick and concrete and entirely fireproof. In this room are accumulated the various machines for putting together and constructing the various machines operating in the plant, with a small annex for the electrician and the supplies necessary for the electrical department.

The live poultry building, including the hatchery, the experimental poultry yards and finally the stables where are kept the fine show horses which the company uses as its advertising medium adjoining the office on the south. The show horses while not at the fairs are used in daily draft service between the mill and the downtown depots, to Council Bluffs, Benson, or any of the adjoining suburbs, the management being firm in its conviction that horses for transportation are very much more economical than power truck service for any trip as far distant as a team may go and return in one day.

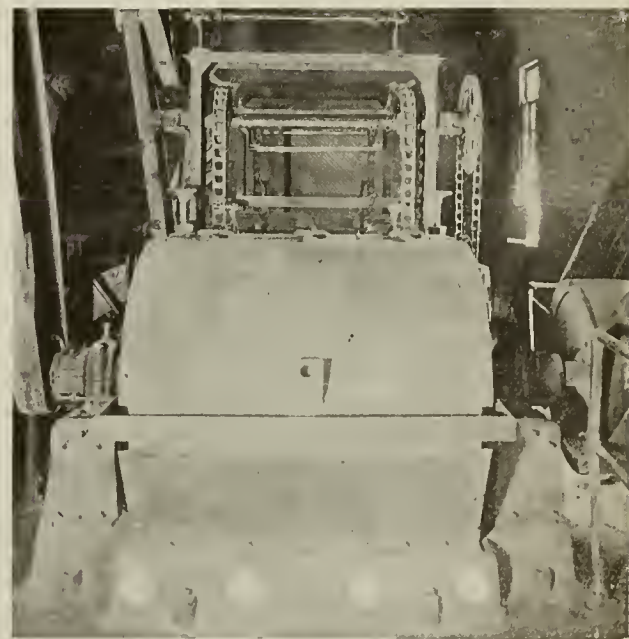
One of the big efforts employed for publicity this season has been the draft horse and saddle horse exhibits shown at the fairs. The six horse hitch of Belgian draft horses, with the wheelers, the famous prize winners, Blucher and Ivanhoe, delighted large audiences at the Corn Belt fairs.



TWILIGHT BLUE, A PRIZE WINNER FROM THE PETERS' STABLE

\$2 per bushel and alfalfa and molasses much cheaper per ton, there was not a fraction of variation in the per cent of corn used in the "Arab" formula. Mr. Peters first sold himself this formula and he contends that no amount of experimentation has convinced him that there is any other proportion of ingredients in a feed that will make as good a balanced ration as in the "Arab" formula.

The M. C. Peters Mill Company is not confined to Omaha alone in its efforts. They have three branch alfalfa meal mills in the Basin Valley of



PETERS' ALFALFA CUTTER

Wyoming at Powell, Garland and Worland, and at Worland the company has two large farms, one of 555 acres and the other of 640 acres. These farms are all under the ditch, the very finest alfalfa land, and are skillfully operated by a competent manager. Another farm some seven miles distant near the town of Durkee, is operated by tenants and produces beets for sugar and alfalfa.

The company also operates another farm of 240 acres and a small farm of 70 acres near Omaha is maintained for the feeding of the cleanings, screenings and sweepings from the mill in order that nothing may be wasted. Last year the company fed 600 steers on these by-products and likewise a large number of horses.

Peters' Red Feather Poultry yards and hatchery

have been well known for very high-grade products and in the 1920 egg laying contest at the University of Nebraska at Lincoln, the Peters' pen of Rhode Island Red hens eliminated all other contestants, excepting two pens of Leghorns from a celebrated eastern poultryman. As the Leghorn is invariably reputed to be the best layer, the accomplishment of these Rhode Island Reds indicated that the poultryman of this establishment knew his business, and that "Red Feather Poultry Feeds" produced good pullets.

The M. C. Peters Mill Company also operates a grain elevator at Lyons, Neb., with about 35,000 bushels' capacity and a large warehouse at Overton, Neb., for alfalfa hay storage. The main office is in Omaha.

In advertising the company has experimented very widely. Trade publications are given full credit for co-operation and far-reaching assistance. Mr. Peters says a dead ad is a waste of paper and ink; that an institution must use live issues and follow them with livelier interest.

THE PLIGHT OF THE CO-OPERATIVES

BY TRAVELER

"I can't think of a farmers' elevator, today, but what would be closed up if it were not for the method bankers have of loaning them money," said a grain man, recently.

This is literally true, as the losses of some of these elevators are tremendous. The banks, however, need not worry about the financial condition of the elevator companies, as their paper is individually endorsed by all the directors, so that behind a loan of say \$50,000, there is collateral in the way of farm property aggregating \$200,000.

This is, of course, very nice for the bankers; but what of the directors of the farmer companies? When this movement,—to organize farmers' elevators,—was first started and the outlook painted in such attractive colors by the glib-tongued orators who fostered the movement, the big farmers of each district clamored for a place on the board of directors. Later, when it became necessary to endorse notes, these same directors were equally anxious for the honor of putting their names on the papers. Few of them ever stopped to think that they were each individually liable for the full amount of the indebtedness. Most of them thought they were liable merely to the extent of the stock which they held.

As the losses piled up and it became necessary to endorse more and more paper, some of the wiser ones began to grow wary, and either got off the board of directors or refused to go on any more paper. Such astute ones were in the minority, however, and today the most of the original endorsers are still on the notes, with no chance of getting others to take their places. They now realize how foolish they have been to assume responsibility for all the stockholders, with no chance of getting anything out of it but an empty honor.

In a vain attempt to get the stockholders to participate with them in the losses now staring them in the face, the directors of some companies have called stockholder's meetings, and threatened to close down unless the stockholders went on the notes with them.

With a few of the stockholders, such threats produced results, but with the majority,—who seldom own more than one share,—a little thought convinced them that they might better lose the \$100 they had invested in the company, than bind themselves to be responsible for several hundred,—and perhaps thousands,—more.

In a recent case, where the indebtedness of the company was somewhere between \$40,000 and \$50,000, the directors agreed to take care of \$15,000 if the other stockholders would secure the balance. At last accounts, they were making very poor headway with the proposition.

As it now stands, there is bound to be a big upheaval amongst farmers' elevators within the next couple of months, unless some miracle intervenes to save them.

Removing Dockage at the Thresher

Experiments in the Northwest Leading to the Elimination of Dockage from Wheat and the Improvement of Wheat Yields*

ONE of the principal agricultural industries of the world is the growing of wheat. The United States produces about 800,000,000 bushels of wheat each year, and about one-third of this, or over 250,000,000 bushels is spring-sown. Most of the spring-sown wheat, or about 200,000,000 bushels, comes from the states of Minnesota, North Dakota, and South Dakota.

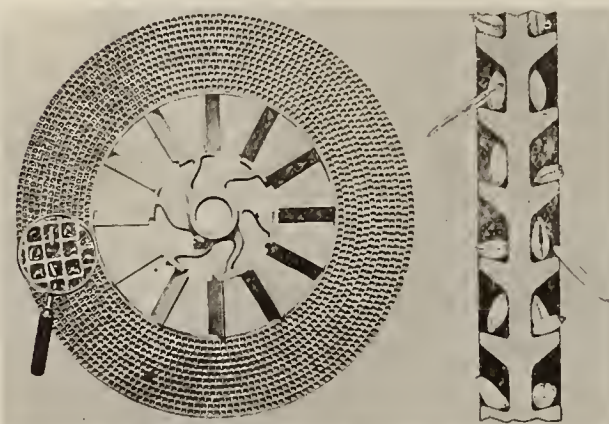
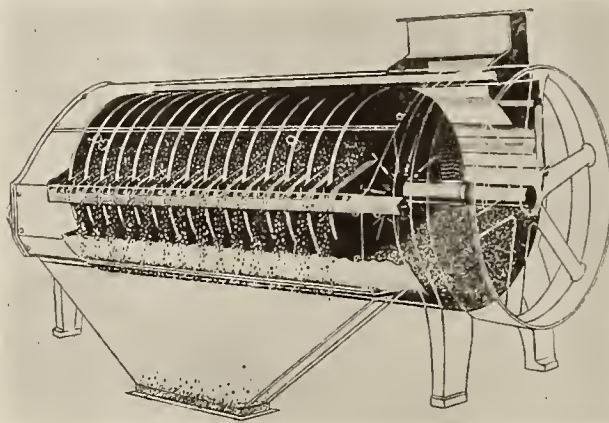
This part of the Spring wheat district has for many years produced grain containing an abnormal

age for the six-year period ending 1914 was 2.9 per cent; and for the six-year period ending 1920 was 4 per cent, while for the 1920 crop of wheat alone marketed up to January 1, 1921, the average dockage was 5.1 per cent. This means that on this basis the 1921 crop of Spring wheat contains over 10,000,000 bushels of 60 pounds each of dockage.

Some of the material removed as dockage has a certain feed value, while other constituent parts of the dockage not only have no feeding value but are actually harmful as a feed. The expense of removing the dockage at the elevators and flour mills at the present time practically offsets this commercial value, with the result that the farmers seldom receive anything for the dockage when they sell grain at their local elevators.

Dockage gets into the wheat from various sources. One of the principal sources is the sowing of foul wheat just as it comes from the threshing machine without any further cleaning. In order to determine just how much foul matter was being sown with the wheat, samples of seed wheat were taken from many of the drills which were seeding in the fields of Minnesota and the Dakotas last spring. On analyzing these samples it was found that a few were almost entirely free from weed seeds, but that the average amount of weed seeds sown with the wheat was over 2 per cent of the weight of the seed wheat. Many of the samples contained over 10 per cent of weed seeds, and one sample of wheat being seeded contained as much as 18 per cent of weed seeds. In terms of numbers of weed seeds sown the range was from 2,000 to 489,000 seeds per acre, each of which was probably capable of developing a strong weed plant. Wild oats, wild buckwheat, vetch, and kinghead, in order named, were the four weeds most common in the seed wheat. If the farmers insist upon sowing the seed as it comes from the threshers without further cleaning, then the threshers should clean the wheat much better than is now being done.

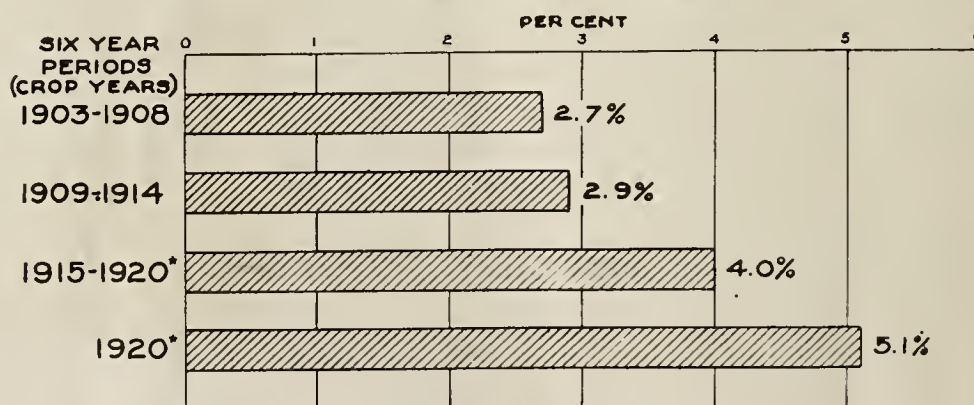
The weed seeds that are in the threshed wheat must be removed before the wheat is ground into flour. Removing these seeds at the flour mills is not only expensive but is also economically wasteful for many reasons, one of which is that the repeated handling of wheat through the elevators and during shipments breaks up many of the wheat



SECTIONAL PARTS OF THE DISK GRAIN-CLEANING MACHINE
Top, showing arrangement of the disks in the frame; lower left, side view of one disk; lower right, cross section of disk illustrating how oats are separated from wheat

amount of weed seeds. The official grain standards of the United States for wheat designate such weed seeds as can be removed readily from the wheat by the use of appropriate sieves, cleaning devices, or other practical means, as "dockage." When wheat is sold on the market the weight

AVERAGE DOCKAGE



* DATA FOR 1920 COVERS CROP YEAR FROM SEPT. 1, 1920 TO JAN. 1, 1921 ONLY.

CHART SHOWING THE GRADUAL INCREASE OF DOCKAGE FOUND IN SPRING-SOWN WHEAT FROM 1903 TO 1920

represented by the dockage is deducted from the total gross weight before payment is made for the wheat.

The Minnesota grain inspection records for the past 18 years show that the percentage of dockage in wheat arriving at terminal markets in Minnesota has been increasing. The average dockage for 1903 was 2.2 per cent; the average dock-

kernels. These small pieces of cracked wheat, which would make good flour if they could be saved, are removed with the weed seeds when the wheat is cleaned in the flour mill, because the small pieces of cracked wheat are approximately the same size as the weed seeds and are removed in the cleaning operation.

A greater economic waste is due to the expense of handling the dockage itself. At the present time the farmers in the central Northwest haul this dockage in the wheat to the elevators and sell the wheat without receiving anything for the dockage.

*Address presented with lantern slides by Robert H. Black, in charge of the Minneapolis office of Grain Cleaning Investigation, U. S. Department of Agriculture, at the annual convention of the American Society of Agricultural Engineers held in Chicago, December 28-30, 1921.

Much valuable space is occupied in every wagon load of wheat, in every country elevator, in every carload of wheat and in every terminal elevator and flour mill by the dockage in the wheat. If this dockage could have been removed at the time of the threshing, the farmer would have been able to feed that part of the dockage having feed value, and he would also have saved the expense of hauling the dockage to the elevator. The farmer would in all probability have received a better price per bushel for his wheat if it had been clean, because, among other things, it is necessary in basing the prices which the country elevator pays for wheat to take into consideration either the cost of removing the dockage or the freight charges which must be paid on the dockage contained in the uncleaned wheat which is shipped to the terminal markets.

Dockage is always a troublesome factor in every stage of the marketing of wheat. It causes suspicion on the part of the farmer when he is selling his wheat, because he has to depend upon the integrity and accuracy of the buyer when the percentage of dockage is being determined. Every time the grain is sold one of the vital questions is, "How much dockage is to be assessed?" The only prevention of many of the disputes that arise during the marketing of wheat at the country elevator is either to raise wheat without dockage or to take the dockage out of the wheat before the wheat is sold by the producer.

The 17 seeds most commonly found in wheat grown in the central Northwest are: Wild oats, wild buckwheat, tame oats, mustard, lambsquarters, barley, green foxtail, hares' ear, flax, rye, cow cockle, pigweed, yellow foxtail, sunflower, corn cockle, wild rose, and wild peas.

In past years, before wild oats became so numerous, it was possible to remove such weed seeds as mustard and cockle from the wheat at the time of threshing by the simple means of placing a sieve in the bottom of the threshing separator, under the chaffer. This method is no longer effective, because the wild oats which are present on nearly every farm in the central Northwest quickly clog the sieves, sometimes to the extent of even stopping the flow of wheat to the grain auger. It is impossible during the threshing to remove many of the weed seeds by blowing them into the straw stack, because if sufficient wind is used to blow out the weed seeds a large amount of wheat will also be blown into the stack. Any apparatus, therefore, for use in connection with the threshing machine which can successfully clean wheat containing wild oats must be able to remove not only the wild oats but also have sufficient capacity to clean the wheat as rapidly as it is threshed.

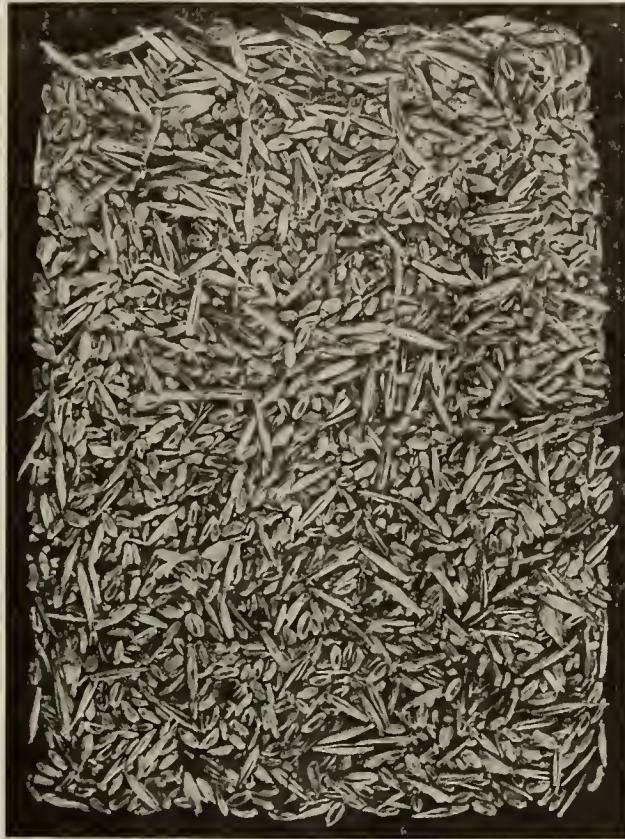
In planning our grain-cleaning experiments to be conducted in the central Northwest, it was decided to concentrate our efforts on the installation of two types of cleaners, namely, an "aspirator" and a "disk machine."

An experimental aspirator designed by E. N. Bates, of the Office of Federal Grain Investigations, was built and installed on a 20x34 Port Huron Separator. The top of the aspirator was fastened to the hopper which is directly below the weigher on the elevator. A valve was built into the hopper under the weigher, so that the grain could be made to flow steadily out of the hopper and onto a metal disk 13 inches in diameter. In operation the grain piles up on this disk and then falls steadily over the edge of the disk in a thin stream. As the grain falls over the edge of this disk, it is treated with a current of air which sucks out many of the smaller and lighter weight particles which are deposited into a settling chamber, and the cleaned grain passes out through a spout into the wagon. The suction is produced by an exhaust fan running 2,500 revolutions per minute and driven from the beater shaft. The total weight of the aspirator and exhaust fan is slightly over 160 pounds.

The aspirator was operated while threshing oats, rye, and a mixture of oats and wheat usually known as succotash. In these experiments between one-third and one-half of the foul material or dockage

was removed from each of the grains mentioned with a slight loss of small and shriveled kernels of grain.

After reviewing the advantages and disadvantages of the various types of cleaning machines on the market, a machine using the basic principle of disks provided with small pockets and moving vertically through the grain was built. This machine was installed on the deck of a threshing machine operating in North Dakota and was used in an experimental way in connection with the



SAMPLES OF SPRING WHEAT, AS DELIVERED FROM A THRESHING MACHINE

These samples contain a heavy admixture of dockage, mostly wild oats, which illustrates the desirability of recleaning wheat at the time of threshing.

threshing of various lots of wheat and admixtures of wheat, oats, and barley containing all the way from 1 to 38 per cent of dockage. In these experiments the disk cleaning machine, or recleaner, as it is generally called, not only cleaned the grain as fast as it could be fed to the threshing separator, but in every instance removed all of the dockage contained in the grain to within 1 per

the results secured the past season in threshing and cleaning over 15,000 bushels of grain demonstrated that grain can be cleaned successfully at the time of threshing to a point where no dockage will be assessed when the wheat is sold on the market. If wheat is cleaned at the threshing machine, farmers would not be paid lower prices or charged discounts because of the dockage which would otherwise be in it, nor would there be opportunity for disputes as to the percentage of dockage which would be assessed. The valuable parts of the screenings can be used for feed, and clean seed wheat will be available for sowing, which will mean increased yield per acre.

The Department of Agriculture is keenly interested from an economic standpoint in developing practical methods which will bring about both the sowing of clean seed wheat and the marketing of wheat free from dockage. These experiments have demonstrated that wheat can be successfully cleaned at the time of threshing, and in the development of this method the agricultural engineers, the threshing-machine manufacturers, and the thresher operators can assist very materially in ridding the Spring wheat states of the dockage problem.

MARKET NEWS BY WIRELESS

State Marketing Commissioner A. T. Nelson of Missouri is planning the purchase of wireless equipment for the dissemination of marketing information throughout the state. This item, even five years ago would have been considered of first page importance by every newspaper in the country. Now it passes almost unnoticed.

Reliable and frequent market reports are of the utmost value to grain shippers and growers. The development of radiograph and radiophone during the war and since, made it certain that this system of communication would soon invade the grain marketing field. The Bureau of Markets has for some time been sending out reports by radiograph, broadcasting reports from Chicago and other points four times a day.

It remained for the Tuscola Radio Supply Station at Tuscola, Ill., to be the first to install a radiophone service to the grain trade with quotations sent out every 30 minutes during the market session, given by James L. Bush. There are already a number of customers of this service: Morris & Stone at Coles; Seaman & Morris Grain Com-



DISK GRAIN RECLEANER IN OPERATION ON THE DECK OF A THRESHING MACHINE

cent, which in the case of wheat would grade as "dockage free" under the Federal standards. The screenings contained very little wheat; in fact, less wheat was found in the screenings removed by the disk recleaner than is ordinarily found in elevator screenings.

In operation the disk recleaner separates the grain delivered from the threshing machine into three parts: (1) Cleaned grain; (2) fine seeds; (3) wild oats, tame oats, barley, and other coarse material. Each of the three parts is discharged from the recleaner through a separate spout.

It is our plan to make certain improvements on the disk recleaner and to continue these investigations through the next threshing season, because

pany at Doran; the Big Four Elevator Company of Mattoon; the J. S. Ashbrook Grain Company at Mattoon; the Farmers Grain Company at Metcalf; and a number of progressive farmers, all in Illinois.

The radio sets are not expensive and the receiving end can be taken care of without experience so that the system is bound to expand rapidly. This is particularly true inasmuch as the Westinghouse Electric & Manufacturing Company is broadcasting important lectures, musical entertainments, general news, election returns and sporting events, and all of this can be had by anyone with a receiving apparatus. Every performance of the Chicago Opera Company is broadcasted and can be heard plainly all over the country through the radiophone.



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We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

Official Paper of the Grain Dealers National Association and of the Illinois Grain Dealers Association

CHICAGO, ILL., JANUARY 15, 1922

BRIEF ON FUTURE TRADING ACT

PRESS dispatches from Washington on January 11 contained a summary of the brief of the U. S. Department of Justice which was submitted to the Supreme Court in defense of the Future Trading Act. As this is being written the full text of this brief has not reached us, but if the summary reported the entire substance of it, then the Department of Justice apparently has missed the whole significance of the suit testing the legality of the Act, which was brought by John Hill, Jr., et al.

The Department's brief dwells upon the old exploded notion that speculation is the same as gambling. The Supreme Court has ruled upon that question and this ruling will hardly be reversed. Speculation is no more gambling than a fire insurance policy is prima facie evidence of incendiarism. But the John Hill case is based upon quite different grounds. One of the chief points at issue is the attempt to destroy property value without compensation. Briefly the points are these:

The value of a Board of Trade membership lies in the responsibility it enjoins upon the holder to live up to the rules and regulations of the Board. This is a guarantee to those who do business with members that they will be protected against sharp practice or other unbusiness-like conduct, which is punishable with expulsion or suspension. This guarantee has made a membership worth around \$6,000. Among the rules of the Board, designed to protect small shippers against large, is the one against rebates. The Future Trading Act provides for membership in the Board of Trade of cooperative companies which pay

dividends on a patronage basis. This, in effect, is rebating, and if it were allowed would destroy the confidence of shippers, make the rebate rule innocuous, and would tend to make memberships worthless.

The press notice of the Department of Justice's brief makes no mention of this issue. But then, the ordinary reporter has no notion of the important part of a trade document. The brief condemns speculation as gambling, and that, from a reporters standpoint, is always news and newspapers invariably play it up to the limit. The fact that it has no real bearing on the case matters not at all.

In the meantime and until the Supreme Court renders its decision, the Future Trading Act will be enforced and the Chicago Board of Trade will operate as a contract market under the law.

THE AGRICULTURAL COMMISSION'S REPORT

THE Commission which has been investigating agricultural problems for Congress has prepared the first section of its report. A summary of the recommendations made are to be found on another page of this issue. The recommendations for the most part are sane and conservative, especially the last, which says:

The renewal of conditions of confidence, and industrial, as well as agricultural prosperity is dependent upon a readjustment of prices for commodities to the end that prices received for commodities will represent a fair division of the economic rewards of industry, risk, management, and investment of capital. These conditions cannot be brought about by legislative formulas, but must be the result for the most part of the interplay of economic forces.

Not quite so reassuring is the first recommendation:

That the Federal Government affirmatively legalize the co-operative combination of farmers for the purpose of marketing, grading, sorting, processing, or distributing their products.

If this means that co-operative enterprises should have privileges denied to other organizations, the suggestion should be downed at once. We have had enough of the playing of favorites. We saw what the Adamson Law did for the railroad brotherhoods, could we expect more favorable results by excepting farmer organizations from the operations of the law?

INTERNATIONAL AGREEMENTS

GRAIN dealers will not have to wait for a reduction in their taxes to realize the benefits of the four-nation pact that insures peace on the Pacific for 10 years at least. Before agreement was reached, the confidence of the world was so restored the foreign exchange took the strongest position it had occupied for nearly a year. The United States has been laboring under a great handicap in the premium of the dollar over other currency. This difference must be overcome before we can begin to talk business; it creates what amounts to an export tax on all our products. The farmer is the greatest sufferer, but the grain dealer shares the burden, for our export grain to a large extent fixes the price for the crop, and there is little profit in handling grain on a steadily falling market.

The strengthening of exchange has already had its effect in export buying, and every further step in equalizing exchange ratios will have its good results.

The Allied Economic Council at Cannes, France, in which the United States, Russia and Germany, by invitation, are participants, is expected to further improve the exchange situation by decreasing the amount which will be required of Germany on its next reparations payment; and possibly by the formation of an exchange bank which will be capitalized by all the nations, and afford means of the exchange of commodities without discounts. This scheme is based on the assumption that the United States would be a large supporter of the bank and that international trade would be stimulated thereby. Whether or not this will be the final solution remains to be seen, but in any event a full consideration of the economic difficulties which confront the business world, will undoubtedly help to restore confidence and a better international understanding. The grain trade has more than an academic interest in these conferences and should watch them closely for their effect on the grain markets.

U. S. GRAIN GROWERS AT WORK

REPORTING at the end of the first week in January, the U. S. Grain Growers have 36,546 members and 866 farmers elevators signed up on their iron-clad contracts. Considering the number of farmers in the grain states these totals are not particularly impressive. But the direct memberships represent a total of \$365,460 paid into the organization. How much is left of this money after the organizers and officers have been paid and what steps have been made to handle the 100,000,000 bushels of grain, said to be controlled by the organization?

So far as we can learn, nobody knows, except, possibly, the officers. It is doubtful if the officers themselves have any definite idea as to how this grain is to be distributed. A meeting is to be held in the spring and perhaps a plan will be formulated at that time. But it is safe to predict that 36,546 farmers are due for a disappointment. They have been fed up on statements of how much the Grain Growers would save both producer and consumer by shortening the route between them; they have been told that the grain gamblers have been responsible for low prices of grain, and that the new organization would effect on "orderly" distribution which would insure high prices at all times. Theories, all theories which have no more basis of truth than the Zionist assertion that the earth is flat.

To distribute 100,000,000 bushels of grain advantageously necessitates an organization of large size and with far-reaching connections. It also means the use of large sums of money and a sound, conservative financial program. This important feature has not materialized, in fact the proposed financial plan has fallen under the ban of the blue sky laws of several states and will have to be abandoned.

One of the principal arguments of the Grain Growers organizers is that the organization will prevent the early season rush of grain

which disorganizes the markets. This, to begin with, is a fallacy, which the Department of Agriculture has proved conclusively. It is to be presumed that the growers will hold grain off the market if prices do not suit their fancy. Last year the Argentine Government adopted a similar plan, by fixing a minimum price at which grain could be exported. The London and River Plate Bank reports that this policy left the country with 27,750,000 bushels of wheat available for export on the old crop which will have to be added to the surplus this year. But we do not have to go abroad for experience. Have the Grain Growers and the farmers forgotten the results of their holding policy the last two years?

It will be an expensive lesson but it should prove salutary. No marketing machinery can be devised that will upset economic laws; no ephemeral theories can supplant a system that has proved its worth for 70 years.

SELLING WHAT YOU HAVE

THE year 1921 will leave a bad taste in the mouth of most grain dealers for some time to come, and for too many 1922 will not be much better. The ones who complain most bitterly are those who have considered themselves simply buyers of grain. If that has been your attitude toward your patrons you might better offer your house for sale before the co-operatives or the Grain Growers or some other agency gets you. Sell out while the selling is good and don't be forced out.

A successful grain dealer is not a buyer; he is a seller—a seller of service. His business is to get as big profits for his patrons as he can. He should be ready and able to advise on the time and method of marketing without making any pretense of being a market forecaster, and should also have something to say as to the best way for the farmer to buy his supplies.

This is the reason that the co-operative movement is spreading. The co-operative organizer points out that the organization is working wholly in the interest of the farmer. It is there to serve him. Naturally the farmer falls for it, even though the independent dealer can and always has served him better. The only difference is that the organizer concentrates on the idea of selling service, while too many dealers have neglected it.

It isn't enough that you have service for sale; it will avail not a bit that you have always considered your patrons' interests as much as your own. You know it, perhaps, but the farmer doesn't, and he is a ready victim of the poison which the organizer is trained to hand out, that the dealer is in business to please the farmer at every turn, and that for protection against his wiles the farmers must organize. That is the sort of thing every honorable grain dealer will be subjected to during the next few years. Co-operative companies will fail, but the farmers will not hear about it. Unfortunately the Federal Department of Agriculture is spending millions each year to foster the co-operative idea, and you, Mr. Dealer, will have to fight the propaganda alone in your territory.

If you have not made a new year's resolu-

tion as yet, think this one over: Sell the idea of your service to every farmer in your community; sell it by personal interviews in which you can point out to him how his interest is identified with your own; sell it by letter; by printed advertisement; and most of all, sell it by actual demonstration, and results achieved.

THE FARM CONFERENCE

ADMINISTRATION officials have called a national farm conference to be held in Washington on January 23. Primarily the conference has political significance; for it will permit the administration to deal direct with agricultural questions, thus drawing the teeth of the agricultural bloc, which has become a thorn in the flesh of the administration through its obstructionist program.

For all its main purpose, the conference promises to be important as it will be representative and may lead to constructive legislation. Among those who have already signified their intention of attending are Julius H. Barnes, Governor Warren T. McCray of Indiana, James Wilson, representing the meat packers, J. R. Howard of the American Farm Bureau Federation, Charles S. Barrett of the National Farmers Union, and representatives of the National Board of Farm Organizations, the National Grange, the U. S. Grain Growers, Inc., the American Cotton Association, the American Cane Growers Association and others. The group representing industries allied to that of agriculture will include the packers, livestock and produce commission men, canners, fruit growers, fertilizer manufacturers, millers, farm implement manufacturers, bankers, railway executives, automobile and truck manufacturers and others. A number of delegates representing the public also will be present.

If the conference were less comprehensive in scope there might be a menace for the grain trade, as the obvious tendency would be for the administration to outdo the bloc in radical agricultural policies. As it is planned, however, the effort will be toward establishing principles rather than specific reforms, and the conference will have its hands full.

GRAIN RATE REDUCTIONS

ALL the rates, reduced to comply with the Interstate Commerce Commission's decision in the Western Rate Case, have become effective and shippers have become familiar with them. The extension of time allowed by the Commission occasioned some confusion as the new tariffs became effective at different times on the various grain roads, and it worked a severe handicap in many cases. The Santa Fe, Chicago & Alton and Union Pacific tariffs became operative on December 27; the Chicago Great Western on December 28; the Colorado Southern on January 1, and other roads in succession until the final date permitted.

The general 10 per cent reduction on all farm products, effective January 1, included rice and rice products according to the amendment to the original permission, made by the Commission on December 29. The

whole subject, including general farm products and grain was opened again on January 11 when the Commission began its general rate inquiry. The hearings on grain, flour and agricultural products is scheduled for February 9, and this will offer the grain trade an opportunity to review the effect of rates on grain and hay marketing. The hay trade particularly should be able to assemble facts that will convince the Commission.

All the roads should have been ready with their new tariffs on December 27, but they counted on the Commission's granting a new hearing and had not prepared the schedules. It was generally believed that the offer to make the 10 per cent reduction would satisfy the Commission until the general inquiry, but the Commission was not to be put off.

At this time it looks as though there could be but one conclusion, if shippers are to be satisfied and the railroads allowed to live, labor cost must be reduced. As the hearings progress there is little doubt but that labor will make itself heard, but the general public has certainly done its share in assuming losses during reconstruction and it is high time that labor took part of the burden.

STARTING SOMETHING

COOPERATIVE live stock associations have become involved in a fight for leadership, which may be the beginning of a breach that will undermine the grain marketing organizations. The quarrel is between the American Farm Bureau Federation on one side, and the Farmers Union, the Equity, and the Missouri Farm Clubs on the other. The Farm Bureau's Committee of Fifteen effected the formation of the National Livestock Producers Association which contemplated supervision over the commission associations in the terminal markets and the shipping associations outside. It would be the whole thing in livestock marketing. The organization set up its machinery at South St. Paul where the Equity was already working, and at East St. Louis in opposition to the Farmers Livestock Commission Company, backed by the Missouri Farm Clubs. These and other disgruntled interests have joined together in the formation of the Farmers National Co-operative Livestock Marketing Association. An Iowa association has since affiliated with it. These organizations freely charge that the Farm Bureau Federation is attempting to overrun farmers' groups. They have gone on record as opposed to the use of county agents to advance the interest of "one organization at the expense of farmers' private enterprises."

It is a hopeful sign that some of the farmers have seen that interference by county agents in private business is not their primary function, and that, through the influence of the Farm Bureau, the agents exercise far more power than is good for them. Too often the county agents are not big enough men to use discretion in their activities and come to believe that the community sun rises and sets upon their dicta. They become so important that any one who opposes them is striking at the foundation root of American agriculture.

As the U. S. Grain Growers is also a child

of the Farm Bureau Federation, it is not unlikely that that organization may also become involved in the stock shippers warfare and find new opposition in many communities that they had counted on as being ready for their net. The haul may not produce as many suckers as was expected.

EDITORIAL MENTION

Are your loss claims protected by scales that you can prove to be correct?

It takes some time to get the habit of making pre-war comparisons rather than war-peak comparisons, but we will have to get the habit.

The farmers want a representative on the Federal Reserve Board. They are still under the delusion that there is a conspiracy in Wall Street against them.

The Kansas wheat crop last year was fourth in volume and sixth in value. The corn crop was 15,000,000 bushels over the 5-year average, but was less than the average in value.

The soldiers' bonus is still, or again, with us. Congress is anxious to pass the bill because it means votes, but how, from whom, and when the money is to be raised is a different kettle of fish.

The rate corn is going abroad for Russian Relief, is a good object lesson to Russia in efficiency. Of course most of the lesson will be lost, but the little that is saved will bear fruit in later years.

There is still an exportable surplus in the country variously estimated at from 30 to 80 million of wheat. Large or small, the surplus will be a drag on the market so long as we are out of line with other exporting countries.

Senator McCumber of North Dakota has been made chairman of the Senate Finance Committee. The job is no sinecure and the responsibility is great—so great that perhaps the Senator will forget some of his earlier notions.

There are 339 pounds more digestible feed in an acre of barley than in an acre of oats in Illinois. A farmer with a large barley acreage need not be under suspicion, therefore, as encouraging the evasion of the Eighteenth Amendment.

Wallaces' Farmer says: "The great lack in all movements to organize farmers has been well trained leadership." Perhaps Mr. Wallace meant, and would accept our amendment, that what is needed is not "well trained," but "well balanced."

Within five years a radiophone will be considered almost as essential in a country elevator as a truck dump. Commission houses will broadcast their bids every afternoon, and the fluctuations in the market will be sent out from the important terminals every 10 minutes or less. In fact most of the news of the day will

be broadcast for all with a radio outfit to hear. It is already being done to a considerable extent, and promises to develop more rapidly than any marketing agency has ever been.

For the 25 weeks ending December 22, wheat exports from the United States and Canada were 231,435,827 bushels, as against 238,155,196 bushels in 1920. In the same period exports of corn exceeded the preceding year by more than 50,000,000 bushels.

Northwestern growers are still clamoring for wheat price stabilization by Government guarantee. The minimum price would be fixed at cost of production. Would the six-bushel-per-acre farmer be satisfied with the national 13-bushel-per-acre price? Not by a jug full.

Senator La Follette started something when he stated that the farmers had been sold out to the railroads in a conference at Washington in which the Farm Bureau participated. It seems the Senator was wrong, but right or wrong he got a lot of free advertising.

Canadian grain shippers are reported to be planning to build a large bulk grain elevator in Japan. Perhaps it would be well to wait for the Eastern questions to be settled before going far with it. Canadians would hardly be satisfied to build for the exclusive benefit of Manchurian and Siberian producers.

A bill providing for the appropriation of \$250,000 to be used in testing grain doors to see if any of those now on the market are adequate, has been introduced into Congress by Senator Lenroot. Reference to the patent office will reveal almost as many grain doors as there were dollars to be appropriated.

Farmers in Argentine, Australia and New Zealand have taken losses as severe as in this country. Their costs were never as high as ours, but their returns are now considerably less. This subject of agricultural readjustment has to be viewed with long range glasses; a local consideration alone would not get us anywhere.

The Supreme Court of Washington has reaffirmed the validity of co-operative contracts, providing for compulsory marketing through the association. Growers and elevator companies should consider this seriously; if they sign up with the U. S. Grain Growers they bind themselves for the full term regardless of how much money they lose.

Illinois shippers are up against it. The southern and eastern parts of the state are not affected by the Western Rate Case decision, so that they are under a great handicap compared with northern and western neighbors. The Illinois Commerce Commission is helpless for the Interstate Commerce Commission, backed up by the Federal court, has nullified the authority of the state body in interstate rates. This can be remedied only by the Supreme Court or by Congress. As the lesser of two evils, or rather as the less hopeless of early attainment, the state Commission has

appealed to Congress to modify the Transportation Act of August 25, 1920, so as to give the state railroads commissions some say in local rate matters. There will have to be a show down and a fair division of authority between the Federal and state commissions. As it is at present there is nothing but friction.

The danger of using carbon bisulphide to exterminate weevil was recently discovered by the Farmers Union Co-operative Elevator & Shipping Association of Kirwin, Kan. Weevil were sifted out of wheat and sent to engine room where fumigant was applied. Heat from engine caused explosion. The manager says, "Never again." What he should have said was "Not in the first place."

To make wheat the unit of exchange is the proposal of Secretary of State Vician of Hungary. Wheat has always represented the nearest approach to an international exchange unit next to gold. As a collateral, properly protected by insurance and hedges, it has been looked upon by bankers everywhere as the best security that could be asked. So really Mr. Vician is proposing nothing new.

The Chamber of Commerce of the United States has appointed a committee, of which E. T. Meredith is chairman, to work out a plan to reclaim waste lands by irrigation, and drainage. Another committee should be appointed to get some of the congested city population onto the land after it is reclaimed. We have several so-called citizens in Chicago that we would gladly spare for this purpose.

Millers are generally bullish on wheat. As one of them said recently: "Cash wheat looks like good property in spite of option weakness. We do not grind options." There is a surplus of wheat in the country, but we are inclined to agree with the millers, that mighty little of it is of a quality they would care to have in their bins. This applies as well to corn and oats. Too much light weight, damaged grain. Watch the spread on high grade cash grain later in the spring.

Dean Farrell of the Kansas Agricultural College believes that farmers are in danger of overdoing the craze for marketing improvement at the expense of production. "It seems obvious," he says, "that the farmer who produces the most value (represented by plant and animal products) per unit of land, labor, time, and capital, is in the most advantageous position under any set of marketing conditions." We wonder what C. H. Gustafson or Clifford Thorne would say to such heresy.

The difficulties of financing farmers' elevators brought out the statement at the South Dakota convention last month, that unless elevators did three things they faced disaster: Increase the capital stock; let patronage dividends accumulate until there is a surplus equal to the capital; abolish the storage of grain and insist on buying at existing market price when grain it hauled to the elevator. This is sound advice, and the lack of these policies is forcing many co-operative elevators to the wall. Private operators should also take notice.

W. T. HALE
Nashville

NEWS OF THE TERMINAL MARKETS

JOHN S. GREEN
Louisville

ELECTION AT SIOUX CITY

At a recent meeting of the Board of Directors of the Sioux City Grain Exchange, H. J. Hutton was elected president of the Exchange for the coming year; P. A. Ketels, vice-president; J. C. Mulaney, treasurer, and J. A. Tiedeman, secretary.

NEW OFFICERS AT ST. JOSEPH

At the annual election held January 3, on the St. Joseph Grain Exchange, St. Joseph, Mo., Chas. A. Geiger was elected president, succeeding C. L. Scholl and A. C. Muech was elected vice-president. The directors for two years are: J. W. Daly, J. D. McKee, C. L. Scholl, W. W. Simmons, and George F. Stewart, with Fred Frederick, C. D. Taylor, M. C. Bruce, W. M. Huff, and H. H. Savage holding over the balance of 1922.

PEORIA BOARD ANNUAL ELECTION

The Peoria Board of Trade, Peoria, Ill., held its annual election on January 9. G. C. McFadden was chosen president; E. R. Murphy, and G. A. Clark, vice-presidents; W. C. White, treasurer; John R. Lofgren, secretary. Directors are: F. L. Wood, J. M. Van Nuys, H. H. Dewey, Wm. S. Miles, J. A. Speers, Geo. L. Bowman, L. H. Murray, Louis Mueller, G. A. Peterson, W. T. Cornelison.

Committee on Arbitration: H. A. Miller, Geo. B. Hornish, J. W. Bryan.

W. A. HALL ELECTED AT MEMPHIS

W. A. Hall of the International Sugar Feed Company will head the Memphis Hay and Grain Association of Memphis, Tenn., the coming year. The other officers, elected at the recent annual meeting and banquet are: C. S. Kenney of the Quaker Oats Company, vice-president, and Walter J. Fransioli, re-elected secretary. The new directors are: Sim F. Clark of Clark, Burkle & Co.; Lee D. Jones; S. F. Pease of Pease & Dwyer Company; W. P. Brown of W. P. Brown & Co.

ELECTION AT TORONTO

The annual meeting of the Grain, Flour, Malt and Hop Section of the Toronto Board of Trade, Toronto, Ont., was held December 27. The following were elected as officers and committees for 1922: Chairman, A. E. McCuaig; vice-chairman, D. Plewes; secretary-treasurer, F. D. Tolchard. Executive Committee: R. C. Braiden, D. C. Ellis, A. T. Flynn, H. H. Goode, F. W. Hay, S. Hisey, A. C. Hogg, W. C. Ormand, M. A. Pollock, C. B. Watts. Market Committee: D. Plewes, chairman; A. E. Flynn, A. E. McCuaig, M. A. Pollock. Official Caller: F. D. Tolchard. Membership Committee: The members of the Executive Committee. Floor Committee: D. O. Ellis, T. F. Harcourt, A. C. Hogg, A. E. McCuaig, D. Plewes.

THE YEAR AT OMAHA

The year 1921 was a somewhat better year for the members of the Omaha Grain Exchange in some respects than the year 1920. The receipts of grain at this market were larger in volume and the shipments correspondingly larger. In view of the continued slump in prices and the immense amount of adverse publicity and legislation, we feel that the right-thinking people are convinced that the grain business is conducted in an efficient and economical way, and that this fact will become more and more impressive during the year 1922.

We are starting the year with correspondingly larger receipts than last year and the general feeling among our members is optimistic. We believe that the bottom has been reached in the agricul-

tural depression and that better times are in store for both the farmers and those interested with them in the handling of their products.—F. P. Manchester, Secretary Omaha Grain Exchange.

NEW OFFICERS GRAIN RECEIVERS ASSOCIATION

At the annual meeting of the Grain Receivers Association of Chicago, Ill., the following officers were elected: George A. Wegener of Wegener Bros., president; Geo. S. Bridge of Bridge & Leonard, vice-president; Harry C. Carroll, E. M. Larson, C. H. Thayer, Geo. E. Booth and Alex Moore, directors.

President Wegener has been associated with the grain business of Chicago since 1885 and has held membership in the Chicago Board of Trade since 1890. His earliest activities in the grain business were with the old firm of W. F. Johnson & Co., later with George H. Sidwell & Co., until May,



GEORGE A. WEGENER

1914, when its entire cash grain business was taken over by Logan & Bryan and Mr. Wegener went along as manager of the cash grain department. The present firm was established in 1919 and is known as one of the thriving and substantial grain houses of the Chicago Board of Trade, doing a general cash grain business.

THE YEAR AT CINCINNATI

The Cincinnati Grain & Hay Exchange, as an organization, has probably fared better in the year 1921 than the majority of the exchanges. We close the year, after having met all of our expenses out of revenue, without the necessity of having to assess the membership to maintain the expenses of the organization; as a matter of fact, we will have a small surplus.

The total volume of shipments moving through this market compares favorably with 1920. The Grain Division has more than held its own. The Hay Division, however, has suffered somewhat, due to the fact that our present market lies to the south of us and as that section has turned to its own feedingsuffs in view of the high freight rates it has had its effect upon this market to the extent of necessitating exceptional vigor on the part

of our firms to maintain their trade but on the whole we believe that it has been successfully accomplished.

During the past year there have been many rate situations that have handicapped the market but as these are gradually being ironed out it is becoming less felt.

The outlook for the future with reduced grain and hay rates in effect is quite encouraging; in fact, since it has been definitely determined that for the present at least there will be no reductions in excess of 10 per cent our firms are finding it easier to place business.—B. J. Drummond, Executive Secretary, Cincinnati Grain & Hay Exchange.

KING 1921 IS DEAD; LONG LIVE THE KING

C. A. King & Co., of Toledo, Ohio, said in closing 1921 letter:

"Another year has passed. General business has suffered. World is looking for better times in 1922. Will they be realized? Prospects are mixed. Agricultural section of the country has suffered severely. We cannot have prosperity as long as the farmer is devoid of purchasing power. All farm products have suffered a drastic decline in price. Grains are selling below the cost of production. Freight rates are still too high. The farmer has to stand the high rates on the product he markets and also has to pay the high rates on merchandise of which he is the big buyer. Labor costs must be cut. People must get down to earth. Prosperity will come when people get back to the old idea of giving an honest day's work for a day's pay. Face the coming year of 1922 with confidence of better times. Forget the past. The future is what you are willing to make it. To all our friends we wish a very Happy and Prosperous New Year."

THE YEAR AT ST. LOUIS

The St. Louis market in 1921 again maintained its eminent position among the great primary grain markets of the country. Despite the depression in prices, which affected agricultural products the past 12 months, the volume of grain handled through the St. Louis market showed a material increase over the preceding two years. The shrinkage in values made trade conditions very unsatisfactory. In general, however, the business in grain, milling and the allied interests was fully sustained, and compares most favorably with that of other primary grain centers. St. Louis has held up well with other markets in both cash and future transactions, and when the final figures are gathered to complete the resume for the year, it is safe to say will show a less shrinkage than perhaps any other of the great primary centers.

The year 1921 will go down in the history of the organization as one of the most eventful in the matter of legislation, both National and state, as affecting the established grain markets of the country. In no 12 months' period since the organization of the Merchants Exchange of St. Louis more than a half century ago, has so much legislation been brought up inimical to the organized Grain Exchanges, and the established methods by which the great cereal crops of the country, aggregating billions of bushels are handled.

The grain trade of St. Louis, however, feels optimistic about the future, and the prospects for the increase of elevator facilities are most encouraging, which, coupled with additional railroad facilities for transporting grain, indicate that the St. Louis market will continue to go forward as a grain center.

The passage by Congress of the Future Trading

Act, placing the organized Grain Exchanges of the country under the jurisdiction of the Secretary of Agriculture, will not affect legitimate trading and speculation. The St. Louis market has been designated as a "Contract Market" under the Act by authority of Secretary Wallace, having met with all the requirements as a "Contract Market" under the terms of the Act.

A marked increase in the transportation of grain by river will be noted when compared with the previous year, and even a larger volume of shipments would have been recorded had the barge line been sufficiently equipped to handle all the grain offered for export by St. Louis interests. The movement of flour and grain by river the past 12 months was as follows: Wheat, 4,295,710 bushels as compared with 974,430 bushels in 1920; corn, 2,639,080 bushels as against 136,605 bushels in 1920; flour, 31,660 bushels as compared with 36,710 barrels in 1920. The decrease in flour, however, was due to the lack of facilities for handling same.—*Eugene Smith, Secretary Merchants Exchange of St. Louis.*

"KENT" ELECTED PRESIDENT

In 1905 when Kenton D. Keilholtz was a youthful trader and cashier of the firm of E. L. Southworth & Co., of Toledo, Ohio, he enjoyed the distinction of being the youngest member, in point of



KENTON D. KEILHOLTZ

years, ever elected to the Toledo Produce Exchange. He was at that time in his twenty-first year. Now, as the head of Southworth & Co., at the age of 36, he has been elected to the presidency of the Exchange and is the youngest president that ever filled the office. At the annual election held January 10, he succeeded Harry R. De Vore, the head of H. W. De Vore & Co.

Mr. Keilholtz has risen from the ranks on his own merits, accelerated and aided by industry and integrity. It might be said of him as Shylock said to Portia, "How much older art thou than thy looks?" He is well known to the trade in Chicago, New York and other markets and all his friends are by no means in his home town of Toledo.

Other officers of the Exchange elected are: Richard S. Sheldon of S. W. Flower & Co., first vice-president; Jesse Hurlbut, second vice-president; George Woodman of Rice Grain Company, treasurer; A. Gassaway, secretary.

The new directors are: Harry R. De Vore, W. A. Boardman, Cyrus S. Coup, John C. Husted, Fred Mayer, David Anderson, Fred O. Paddock, Frank R. Moorman, John Wickenhiser, Frank W. Annin. Committee of Arbitration: J. A. Smith, L. A. Mennel, J. W. Luscombe, E. A. Nettleton, Fred W. Yaeger, Henry Hirsch, H. W. Applegate.

Committee of Appeals: S. L. Rice, O. H. Paddock, R. L. Burge, G. J. Rudd, P. M. Barnes, G. A. Krehlah, W. E. Stone, J. A. Streicher, L. J. Schuster, C. E. Patterson, H. O. Barnhouse.

The newly elected officers invited all members

to a dinner at the Toledo Club at 6:30 P. M., January 13. Report stated that, being at Toledo, all the diners were in good spirits.

THE PAST YEAR AT MILWAUKEE

The Milwaukee grain men are glad that they can speak of 1921 as "the past year," instead of the "coming year." They are glad it is over and done with. That much we can say at the beginning.

The grain man—and the Milwaukee member of the order is no exception to the rule—is naturally an optimist. And he is game. He takes his wallops with about as good grace as anybody in any line of business, but, speaking of the conditions of the past 12 months, he is ready to say he is glad it is over.

The total receipts of grain at this market were fairly good, 70,500,000 bushels, in round numbers, an increase over the receipts of 1920 of 14,000,000 bushels, but even with this substantial increase they were not quite equal to the average annual receipts for the five-year period, 1916 to 1920. The receipts of corn were far in the lead of the other grains, the year's arrivals totaling 30,000,000 bushels. Arrivals of other grains were as follows: Wheat, 9,000,000 bushels; oats, 19,000,000 bushels; barley, 10,000,000 bushels; rye, 2,500,000 bushels. Milwaukee ranked second among the primary markets with respect to receipts of corn for the crop year ending November 1, and third with respect to oats for the 12 months ending August, 1921. Total shipments of grain for the calendar year were 51,500,000 bushels, of which 31,217,691 bushels were shipped by lake, 17,558,373 bushels being unloaded at Canadian ports, and 13,659,318 bushels at American ports.

The year marked the culmination of the agitation against the grain exchanges that has been more or less in evidence for many years past. Congress brought forth the Capper-Tincher Law as the panacea for all the ills of the farmer so far as those ills are attributed to the grain exchanges, and 1921 will always be remembered as the year of the big fight the Exchanges were compelled to make in order to demonstrate their usefulness and prove that their methods were of benefit to the entire country—farmer and everybody else.

They did demonstrate it, however, and that fact is recognized by the law, in that it does not interfere with trading in futures, and really gives it a legal standing that it has not heretofore enjoyed.

The Milwaukee Chamber of Commerce was one of the exchanges which applied for and received the designation of "contract market" under this law. In looking forward to the new year, the Milwaukee grain men do so with a feeling of satisfaction that the determined fight that was waged by the agricultural interests has been finally disposed of, and they can now go ahead, knowing just where they stand. There is some satisfaction in that.

The organized markets have so far withstood the most violent assaults ever made against them. They feel that they are right in their contention that the system of distributing the grain crops of this country is based on sound economic principles, and reduces the cost of marketing to a minimum, and they are exceedingly loath to believe that other systems proposed will be as efficient and economical. Time alone will tell that story, and the history of the next few years will show whether the system of evolution must give way to that of revolution.

It may possibly be said that the grain men are too confident. Overconfidence, to be sure, leads to many a downfall. But the established grain dealers are accustomed to competition—that is the very life and essence of their business—and it is not to be expected that they should become wildly alarmed at the menace of a marketing plan which may be aimed at their destruction.

As a matter of fact, they do not fear competition—if it is fair competition. What they do fear is unfairness, for that is one of the things that is not tolerated in their dealings with one another.

If they made an outcry or protest against being brought into competition with a rival organization in an open field and on an even keel they would get no sympathy from the public—and they would not deserve any. That they are not doing, however. They are contending only for the right to conduct a legitimate and honorable business as such a business ought to be conducted, with no special privileges accorded either to themselves or their competitors.—*H. A. Plumb, Secretary Milwaukee Chamber of Commerce.*

ROBERT McDUGAL NEW PRESIDENT OF CHICAGO BOARD

Robert McDougal, on January 9, was elected to succeed Jos. P. Griffin as president of the Chicago Board of Trade. More interest was displayed in the election than in any for years, 1,054 ballots being cast. Delegations were present from Kansas City, St. Louis, Omaha, Minneapolis, Toledo and other markets, which helped to swell the large majority by whose votes Mr. McDougal was elected.

The other officers elected were: James J. Fones, first vice-president to fill the unexpired term of



ROBERT McDUGAL

T. M. Cunningham, resigned; Joseph F. Lamy, second vice-president; directors: James K. Rioriden, Joseph W. Badenoch, Louis C. Brosseau, Henry A. Rumsey, Royal W. Bell. The unexpired term of J. C. Murray, resigned, was filled by George A. Wegener. The following were elected to serve on the Committee of Appeals for two years: Frederick G. Winter, John A. Low, Eugene Schifflin, Otto W. Glenk and Edward P. McKenna.

President McDougal is one of the best known grain men in the country. He has always handled cash grain and was for years a member of the firm of Knight & McDougal, selling his interest in that company when we got into the war, to accept a position in the Government service at \$1 per year. Since the war he has not made any formal business connections, but maintains an office in his old quarters in the Postal Telegraph Building.

THE YEAR AT BALTIMORE

A review of the Baltimore grain trade for the year 1921 reveals some strange features. Foreign governmental agencies, hitherto liberal buyers of grain, are all financially strained, and individual firms abroad have not been in position to buy large quantities. This enforced economy of the people in foreign lands, and the unfavorable rate of ex-

change, added to the depreciation of the market value of cereals generally, so that, compared with 1920, prices of wheat and corn were materially lower, and the movement abroad, the last year of wheat was the smallest since 1918.

Notwithstanding the falling off in the exports of wheat, oats and rye, from Baltimore in 1921, as compared with the previous year, the total of all grains shipped abroad is about 1,500,000 bushels in excess of the exports in 1920, brought about by the remarkable gain this year in the shipments of corn, which, by a total of about 20,000,000 bushels, constitute the greatest movement of corn abroad since 1906, Germany having been a free buyer of corn during the past five months.

The total receipts of all grain in Baltimore for 1921 were roundly 61,759,000 bushels, or 3,460,000 bushels less than in 1920. The decrease in the movement of wheat and rye to the seaboard markets was due mainly to the more favorable freight rates enjoyed by Montreal on the North, and the Gulf Ports to the South. The decline in the exportation of oats, which, for 1921 amounted to only about 629,300 bushels, as against 2,030,833 bushels in 1920, is attributable mainly to the very light weight of the past season's oat crop, this having placed oats in disfavor with foreign buyers, who depended upon home grown and Canadian.

The elimination of Russia as a competitor for the world's trade in foodstuffs was responsible for quite a few non-European nations turning to the United States during past year for supplies, and both Japan and China bought heavily of Pacific Coast wheat during 1921. An unusual feature of the grain export trade of Baltimore was the shipment of a full cargo of Manitoba Northern wheat from Baltimore late in October to Bombay, India. During the closing days of the old year quite a stimulus was given the corn market by the announcement that \$20,000,000 had been appropriated for Russian relief by our Government, and much of this sum would go toward buying corn for that country.

The constant increase in the movement of hay from surrounding country by motor trucks delivering their loads, in many instances, direct to the consumer, and an entire absence of export inquiry, are reflected in the steady falling off in the hay business.—*James B. Hessong, Secretary Baltimore Chamber of Commerce.*

PAST AND FUTURE

Gray days of business depression are passing. There is every indication that the era of prosperity—sound, sane prosperity—will be ushered in during the new year. The recent depression undoubtedly had a beneficial effect upon business generally. It made it clear that the bonanza days of wartime are over. It forced business men to realize the necessity for conservative methods in the changed world of reconstruction times. It brought industry down to solid earth and sober judgment. It made success a matter of hard work.

Signs of better days ahead are unmistakable. There is a more rapid acceptance of price readjustments by industry and by labor. There is cheaper money and easier credit. Liquidation has gone far. Banks are in a sound, safe position. Reserves of over 70 per cent are shown by the Federal Reserve system. Output of iron and steel is increasing.

Industrial revival, based on actual comparative statistics, is widespread, and with the increase of production there is a gradual decrease in unemployment. Business failures are fewer than during the deflation period. Reduction in freight rates and revision of taxation laws would greatly hasten the return to prosperity. Present tax laws discourage investment in industry.

Legislation, however, cannot force a return to prosperity. Beneficial legislation must conform to economic laws. No better proof of this is found than in this year's records of the grain industry.

True, deflation hit the farmer first, hit him a staggering blow from which he has not yet recovered. No sooner had war prices for grain started shrinking than Congress and the legislatures were

deluged with proposed new laws. Each was a cure-all for low grain prices. Most of them utterly ignored economic laws. Some were little more than an expression of personal views of a professional organizer who sought destruction of the grain distributing system and the establishment of some theoretical machine similar to the hundred that have collapsed in the last decade.

It can be readily understood that much destructive criticism would inevitably cause serious disturbance in the trade, and tend to discourage investment and judicious, competent speculation which the highest authorities agree is essential to the economic distribution of grain. Such business disturbance, in the natural course of events, reflects in a measure back to the farmer. Regardless of whether the intentions of those fostering the numerous proposed laws were of the most sincere character, the reaction upon the producer was unavoidable.

How long the wave of agitation for class legislation can continue remains a question which business itself may be called upon to decide. It is realized that American initiative, the thing that has built up the wealth of the nation, is not only



JOHN R. MAUFF

being hampered, but in many cases destroyed by such agitation.

During the unsettled conditions that obtained in 1921, the Chicago Board of Trade, the hub of the world grain business, continued to serve the producer and consumer as in the past. It has made possible a ready market in which the farmer could sell his grain at any hour of any business day at prices based on the inexorable law of supply and demand.

As many as 2,000,000 bushels of wheat have been received by the Board of Trade in a single day.

If this wheat were placed in 40-foot cars each holding 1,000 bushels it would make a train 14 miles long. Placed in 50-bushel wagons the procession would extend 150 miles.

This represents only wheat receipts, and for but a single day. It will help to visualize the magnitude of a market that has grown from a wagonload bartering station to such proportions that its "cash" department handles 400,000,000 bushels of actual grain a year—double the receipts of any of the 10 other markets. It is a market with a grain storage capacity of 55,000,000 bushels.

The Board of Trade is an association that neither buys nor sells grain, but which provides a meeting place for world buyers and sellers of grain. It fixes rigid rules governing trading. A trader who violates a rule is expelled and his membership, valued normally at around \$7,000 is forfeited. His business career is forever blackened. The Board of Trade is a democratic institution. Each

of its 1,610 members has a voice in all elections and other association activities.

The futures market, the center of the legislative attacks, has made the Board of Trade the most economical food distributing agency in the world.

The world eaters of white bread normally consume 3,500,000,000 bushels of wheat. In 1914 this precise amount was produced. But the following year there was 4,000,000,000 bushels; then 3,500,000,000; then 2,000,000,000.

Thus it may be seen that a variation of 500,000,000 bushels may occur from year to year.

The present marketing machinery permits orderly distribution of the surplus crop. The system has been developed by the best minds of the last three-quarters of a century.

The futures market provides hedging facilities. Hedging is nothing more than commercial price insurance. This insurance cuts down the risk of grain ownership. It injects an element of safety. This safety makes for higher prices for the farmer.

The Committee on Economic Research of Harvard University, in considering the recently enacted legislation known as the "Future Trading Act," has expressed through its chairman, the opinion that this legislation could not have any effect but to react injuriously upon the farmers.

At a recent banquet in London, to the president of the Royal Commission on Wheat Supplies, Sir Alan Garratt Anderson, who was vice-president of this Commission during the war, in proposing a toast to the grain trade said:

"The essential functions of the Government were to protect and help trade, but not to take it in hand. The Government's job was to let the traders do the business themselves. By the miracle of private enterprise and individuality our nation has become great and by a repetition of that miracle we should climb from the valley of shadows in which industry was today."

This is all confirmatory of the thought that the Board of Trade functions best when not interfered with and that individuality and private enterprise is the strongest foundation upon which the producers and consumers can meet in the economic distribution of the cereal crops.

A hopeful sign is the fact that farmers themselves, in spite of the attempts of organizers to discredit the present marketing system, are beginning to look askance at the professional organizers. They are less responsive to glowing promises that obviously cannot be fulfilled; they are beginning to realize that hollow words alone cannot replace machinery that has functioned successfully for three-quarters of a century. They have, in a word, begun to think for themselves.

So the exchanges turn to the new year with a feeling of confidence that the grain trade as well as other industries have passed through the most difficult part of the post-war transition period.—*John R. Mauff, Secretary, Chicago Board of Trade.*

TERMINAL NOTES

The Peker-Gibson Grain Company has succeeded the Peker Grain Company, Ltd., of Winnipeg, Manitoba.

A. J. Barrett and J. Frank Bittle withdrew from the firm of E. Lowitz & Co. of Chicago the first of the year and John Lowitz was admitted to partnership.

Charles I. Brayton, who has been connected with Stein, Alstrin & Co. of Chicago for a number of years was admitted to partnership January first.

Harry F. Todd, recently of Simons, Day & Co., has formed a joint account with Beach, Wickham Grain Company with offices in 543 Postal Telegraph Building, Chicago.

J. B. Gilfillan, Jr., well known grain man of Minneapolis, Minn., has re-engaged in the grain, stocks and bond business with offices at the corner of Seventh Street and Second Avenue, South.

We acknowledge the receipt of a number of unusually handsome holiday cards this year, among the senders being the following: Halliday Elevator Company, Cairo, Ill.; Milwaukee Chamber of Commerce, Milwaukee, Wis.; J. F. Zahm & Co., To-

Iledo, Ohio; Southworth & Co., Toledo, Ohio; Lowell Hoit & Co., Chicago, Ill.; Willis E. Shelden, Los Angeles, Calif.; Pope & Eckhardt Company, Chicago, Ill.

George A. Plummer, who was with E. W. Wagner & Co., of Chicago for 14 years, has become associated with the new firm of Dean, Onativia & Co., with offices at 332 South La Salle Street.

The Hottotlet Company of Milwaukee, Wis., has been incorporated with a capital of \$25,000 to engage in a general feed and grain business. Incorporators are Max Hottotlet, Nettie A. Pleyte and Emil C. Rahr.

M. B. Jones & Co., New York, N. Y., dealers in grain, cereals, feeds, etc., have incorporated with a capital stock of \$50,000. Incorporators are M. B. Jones, E. S. Quinn and Newton G. Aventis, all of Brooklyn, N. Y.

J. S. Bache & Co., of Chicago and New York, recently admitted Edward Wise, formerly president of the United Cigar Stores Company of America, and N. Kahn to partnerships. Edward K. Scheffelt has retired from the firm.

The Chicago Board of Trade members by a recent vote of 403 in favor to 7 against, adopted amendments to the rules to comply with the Capper-Tincher Future Trading Act, which became effective December 24, 1921.

The Electric Steel Elevator Company of Minneapolis, Minn., recently purchased the American Malt & Grain Company's plant at Buffalo, N. Y. It will use the purchase in connection with the export trade of the company.

Barnard V. McKinney and Cecil W. Wilson, grain brokers on the New York Produce Exchange, entered into partnership early in January to conduct a general grain brokerage business under the style of McKinney & Wilson. Offices are in the Produce Exchange Building.

E. E. Quigley, grain broker and bond dealer of Regina, Sask., failed recently. The preliminary statement submitted by the creditors showed liabilities of about \$85,000, exclusive of \$20,000 liabilities to secured creditors in Winnipeg, and assets of approximately \$15,000.

The McCaull-Dinsmore Grain Company of Minneapolis, Minn., has closed its office in Great Falls, Mont. The company, previous to opening the office at Great Falls, handled its business for the State of Montana through its office at Helena and that policy will be resumed.

The Minneapolis Crosby Exchange of Minneapolis, Minn., has incorporated with a capital of \$150,000 to act as agent, broker and manufacturer of grain products. Officers of the company are Charles D. Fist, president; J. E. Barr, vice-president; B. A. Brown, secretary and treasurer.

The partnership of the Holland-Harris Grain & Milling Company of St. Louis, Mo., was dissolved January 1, and the business is continued by James F. Holland at the old location. Hugh Harris organized the Hugh Harris Company for the purpose of engaging in the grain, flour and feed business.

The Delmar Company has been organized at Minneapolis, Minn., to handle the cash grain business of Armour Grain Company on that market. W. G. Kellogg is president of the company and R. Sharp Stephens, vice-president. The company operates the Delmar Elevator which was recently made "regular."

B. C. Moore, receiver for the F. B. Clay Grain Company of Kansas City, Mo., who has paid a dividend of 30 per cent to creditors, announces that 100 cents on the dollar will probably be realized. In the meantime Frank B. Clay and J. F. Leahy of the defunct firm have organized the Clay-Leahy Grain Company and are conducting a grain business with offices in the Glover Building.

Incorporation of the Randolph Grain Company of Toledo, Ohio, with a capitalization of \$25,000 was recently announced. Incorporators are O. W. Randolph and Chas. W. Mollett of Toledo and Earl D. Bloom of Bowling Green. Mr. Randolph and Mr. Mollett have been members of the Toledo Produce Exchange for a number of years being interested

in the Central Elevator Company and the Lake Erie Milling Company. Mr. Randolph is also a manufacturer of the Randolph Grain Drier. The Central Elevator has a capacity of 200,000 bushels and is well equipped to handle grain.

The Froedtert Malting Company of Milwaukee, Wis., one of the largest malting concerns of the country, has opened a cash grain department with J. Walter Rice as manager. The company's elevators located in Milwaukee, Red Wing and Winona, Minn., have a combined capacity of more than 2,500,000 bushels.

The annual dues on the Chicago Board of Trade have been fixed by the Directors at \$150 for this year, the same as 1921. The Directors also approved of a new clearing house plan. At the meeting President Jos. P. Griffin was presented with a large bouquet of flowers, it being next to his last directors' meeting.

E. F. Leland & Co., of Chicago, have moved their general offices to new quarters in the O. C. L. Building, No. 166 West Jackson Boulevard. They have 7,000 square feet of space on the bank floor of that building with equipment for what is believed one of the best brokerage offices in the West. A special ventilating system was installed for the comfort of employees and customers.

The firm of Dean, Onativia & Co. was formed at Chicago the first of the year to conduct a general business in grain, stocks, cotton, etc. Offices are in the Postal Telegraph Building in quarters formerly occupied by Simons, Day & Co. Members of the firm are J. Clarke Dean, J. Victor Onativia, Jr., E. F. Rosenbaum, E. S. Rosenbaum, and Hart Taylor. Memberships are held in the New York Stock Exchange and New York Cotton Exchange, Chicago Stock Exchange and Chicago Board of Trade.

Early in January T. E. Hamman purchased the interests of Victor Dewein in the firm of Dewein-Hamman Company of Decatur, Ill., and has consolidated with Harrison, Ward & Co., of Bloomington, Ill. The firm has offices in Bloomington, Peoria and Clinton, with 13 country elevators in connection with their modern concrete transfer elevator at Decatur. The business at all points will be operated under the firm name of Harrison, Ward & Co., and all offices remain under the former management. D. M. Cash remains with the Decatur office.

E. W. Wagner & Co., prominent grain, stock and bond firm of Chicago and New York, with over 30 branch offices in various cities, passed into the hands of a receiver December 30. The cause of

the failure was given as "bucket" operations on the New York Stock Exchange and over extension of business. Assets were given out at \$5,000,000 and liabilities at \$7,500,000. Federal Judge Landis named The Central Trust Company of Chicago as receivers and H. C. Brenner and F. E. Hummel of that institution took charge of the firm's main office at 208 South La Salle Street. At New York the suspension of the firm was announced from the rostrums of the Stock Exchange and the Cotton Exchange during the early afternoon. Judge A. N. Hand of the Federal Court appointed J. S. Shepard, Jr., receiver under bond of \$200,000. The firm was established in 1884, but has been connected with the New York Stock Exchange only since 1916, when it succeeded the firm of Reskorf, Lyon & Co. It was a co-partnership consisting of E. W. Wagner, F. Ernst Tietjens, C. A. Johnson and Frank W. Donaldson. After the failure the firm made the following statement: "E. W. Wagner & Co. have been in business for 37 years, and we hope liquidation of our affairs will justify confidence that has been placed in us. Unfortunately, our business was over-extended and our capital became, in the judgment of the New York Stock Exchange authorities, insufficient to assure complete protection to our clients. The business is out of our hands, but we shall render every assistance possible to those in charge. If properly and gradually liquidated we believe our assets will be ample to take care of our obligations."

SCREENINGS FOR FUEL

Many tons of screenings, taken from the western grain when cleaned at Port Arthur elevators, have, during the past few months, been dumped into Thunder Bay. Formerly of considerable market value owing to their feed qualities, it has lately been found impossible to otherwise dispose of the available quantities, and the elevators have sought means of getting rid of them.

After the practice of dumping them into the bay was commenced, their use for fuel was tried, and met with success, especially in larger heating plants, and a number of the bigger blocks of Port Arthur and Fort Williams are now being heated by the use of screenings. This, however, has not taken all the screenings at the elevators, and meanwhile the health authorities have entered a protest against throwing them into the bay, owing to possible contamination of the water supply. Local promoters are looking into the possibility of using them for manufacture of commercial alcohol, and the establishment of a plant of such a nature.

TRADE NOTES

The Philip Smith Manufacturing Company of Sidney, Ohio, has passed into the hands of receivers. Hess & Hess, attorneys, of Sidney, were named as receivers by the Court of Common Pleas of Shelby County, Ohio.

We have received from the grain trade a number of unusually handsome wall calendars for 1922. Those from the machinery interests included the Wolf Company of Chambersburg, Pa.; Robinson Manufacturing Company of Muncy, Pa.; Spencer Construction Company of Baltimore, Md.; P. F. McAllister & Co. of Bloomington, Ill.

The Kennedy Car Liner & Bag Company of Shelbyville, Ind., has registered the name "Kennedy's" as a trade-mark for use with car liners and other articles manufactured and sold from paper by the company. Kennedy Car Liners have been for years an indispensable article in the grain elevator plant, and their use has saved millions of dollars to the grain industry.

Blaylock & Knapp, steel contractors, with offices in the Monadnock Building, Chicago, Ill., who specialize in steel work for grain elevator plants, have started work on a new factory building at 1230-1234

School Street, Chicago. It is located directly on the Chicago, Milwaukee & St. Paul Railroad Company's tracks. The company had contracts for the steel work on a number of large elevators the past year.

The purpose of "Eureka" Indented Cylinders is to separate impurities of a round and semi-round nature from grain or seeds of an oblong shape. That being known, we take pleasure in calling attention to Bulletin No. 93, just issued by the S. Howes Company of Silver Creek, N. Y., which illustrates and describes this machine. Like all of the S. Howes literature, the booklet goes further than merely describing the machine, and presents it in its relation to the grain and milling industries. Thus it gives valuable information on the subject of weed seeds and the outstanding characteristics of the more common varieties, pointing out how disastrously they affect wheat flour. It gives facts also on cleaning of grain in its preparation for the rolls that all millers will be interested in reading. The booklet may be obtained by dropping a request to the "Eureka" house at its home or any branch office.

NEWS LETTERS

ST. LOUIS

S. F. LARRIMORE

CORRESPONDENT

A VERY comprehensive review of the St. Louis market was printed recently in one of the leading St. Louis daily papers. It said in part: "St. Louis in 1921 again maintained its eminent position among the great primary grain markets of the country as is shown by the statistics tabulated by the secretary's office of the Merchants Exchange. The figures show that both the receipts and shipments of flour, wheat, corn, cotton and wool of the St. Louis market during 1921 exceeded the movement of those commodities of the previous two years."

"The movement of the more important grain items was as follows: The receipts of wheat for the past 12 months amounted to 48,416,393 bushels, as compared with 35,974,738 bushels in 1920, and 43,725,847 bushels in 1919. Receipts of oats were 20,740,085 bushels in 1921, as compared with 30,678,185 bushels in 1920, and 32,711,190 bushels in 1919. Receipts of corn were 29,315,548 bushels in 1921, as compared with 26,386,497 bushels in 1920, and 20,636,170 bushels in 1919."

"Shipments of wheat totaled 36,245,540 bushels in 1921, as against 26,204,150 bushels in 1920, and 31,749,920 bushels in 1919. Corn shipments amounted to 21,422,795 bushels the past year, as against 14,971,170 bushels in 1920, and 12,071,105 bushels in 1919. Oats shipments were 19,889,490 bushels in 1921, as against 22,354,695 bushels in 1920, and 23,025,360 bushels in 1919."

"The grain trade of St. Louis, feels optimistic about the future and the prospects for the increase of elevator facilities are most encouraging, which coupled with additional railroad facilities for transporting grain, indicate that the St. Louis market will continue to go forward as a grain center. The passage by Congress of the Future Trading Act, placing the organized grain exchanges of the country under the jurisdiction of the Secretary of Agriculture, will not affect legitimate trading and speculation. The St. Louis market has been designated as a 'contract market' under the act by authority of Secretary Wallace, the St. Louis market having met with all the requirements of a 'contract market' under the terms of the act."

The following visitors were on the floor of the Merchants Exchange recently: John E. Geraghty, president of the Northwestern Feed Company, of Minneapolis; H. R. Strauss, of Picard & Strauss, feed dealers of Chicago; H. E. Hughes, Brooks Elevator Company, Minneapolis; Garnet Zorn, S. Zorn & Co., Louisville; Sam S. Carlisle, of the Carlisle-Burns Grain Company, Omaha; Otto Weiss, Alfalfa miller of Wichita, Kan.; T. L. Halsey, of the Holden Milling Company, Holden, Mo.; Cecil Moss, Cherry Moss Grain Company, Union City, Tenn.; C. B. Rader, Secretary Grain Exchange, Denver; L. E. Davy, Acme Milling Company, Oklahoma City, and others.

Hugh Harris, of the Holland-Harris Grain & Milling Company, of St. Louis, retired from the firm January 1, but has not yet made any announcement as to his future plans. The Holland company will continue in business in the Gay Building.

It is reported that farmers throughout southwest Missouri are being aided considerably by loans from rural banks. These loans were made possible by assistance from the St. Louis branch of the War Finance Corporation. Over \$750,000 are to be available for that section and it is expected to very materially aid that district in its preparation for next year's crop.

The transportation tax of 3 per cent on freight charges has been repealed, taking effect on shipments made on, or after, January 6, 1922, according to a report made by Traffic Commissioner Rippin, of the St. Louis Merchants Exchange, recently.

The Missouri State University at Columbia has started the second term of its agricultural course with a very encouraging enrollment. Extra courses in dairy work and other special studies are avail-

able. This school is one of the most efficient in the country and has been the means of very materially raising the efficiency of Missouri farmers, and in addition to teaching scientific farming, of assisting in creating "business farmers."

Applications by the Missouri Pacific Railroad and by other roads to the Missouri State Public Service Commission to put into effect a decrease in rates on farm products of about 10 per cent have been approved by that body.

Stocks of flour on hand at St. Louis were as follows: January 1, 1922, 91,700 barrels; December 1, 1921, 84,470; January 1, 1921, 79,010.

The Merchants Exchange of St. Louis held its annual election January 4, 1922, and the following unopposed candidates were elected: George F. Powell, of the Powell & O'Rourke Grain Company, president;



GEORGE F. POWELL

W. J. Edwards, of W. J. Edwards & Co., first vice-president, and Samuel Plant, of the George P. Plant Milling Company, second vice-president.

The Board of Directors will consist of: Nat. L. Moffitt, W. J. Niergarth, R. R. DeArmond, Fred W. Langenberg, W. K. Woods, M. R. Parrott, H. A. Diamant, C. L. Hiemeir, E. T. Stanard and Ludwig Hesse. The Committee of Appeals will have J. Paul Berger, E. C. Dryer, C. A. Morton, Chas. E. Valier, A. H. Beardsley, John H. Herron, O. J. Wooldridge, Alex. C. Harsh, E. F. Catlin, John C. Burks, Logan M. Baxter and Alex. L. McDonald.

The initial meeting of the newly elected officers and directors of the Merchants' Exchange of St. Louis was held on January 10, with Geo. F. Powell, president, and W. J. Edwards and Sam Plant, first and second vice-presidents, respectively. Fred W. Langenberg, elected to the Board, was unable to attend account of illness. President Powell appointed all standing committees to serve during the year 1922. Eugene Smith was re-appointed as secretary, and Percy Werner re-appointed as attorney.

The Board of Directors approved the report of the Legislative Committee regarding referendum of the Chamber of Commerce of the United States, relating to Tariff Principles, voting in favor of propositions No. 1, 2, 3, 4 5 and 6, and opposed to No. 7 and 8. John L. Messmore was re-appointed as Councillor and Delegate of the Merchants Exchange of St. Louis to the Chamber of Commerce of the United States.

The chairman of the standing committees for the coming year are as follows: Real Estate, Geo. F. Powell; Honorary Membership, M. G. Richmond; Finance, N. L. Moffitt; Membership, F. W. Langenberg; Traffic, W. K. Woods; Weights, W. J. Edwards;

Complaints, Ludwig Hesse; Rules, H. A. Diamant; Future Delivery Contracts, M. J. Connor; Appeals, S. A. Whitehead; Market Reports, M. R. Parrott; Grain, W. J. Niergarth; Barley, F. C. Orthwein; Flour Inspector, Samuel Plant; Feed, Chas. E. Valier; Provisions, Geo. Bischoff, Jr.; Seed, R. W. Pommer; Hay, W. H. Toberman; Hay Arbitration, H. L. Bondreau; Produce, M. G. Richmond; Floor, J. A. Connor; Postal Affairs, H. A. Diamant; Legislative, Samuel Plant; Insurance, H. E. Popin; Reception and Entertainment, N. L. Moffitt; Mississippi River, Marshall Hall; Elevator Construction, F. W. Langenberg.

We hear a great deal about fraud land sales and of persons being induced to buy worthless lands. This is a tale of opposite kind. A farm of 400 acres near Dexter, in southwest Missouri yielded 20,000 bushels of rice, filling 18 earloads. The yield was recently sold to the Empire Mills of New Orleans for \$1 a bushel, or approximately \$20,000—a gross return of \$50 per acre on land that only a few years ago was useless. And results such as these were secured during a year when very low prices prevailed.

The St. Louis Stock Exchange will move sometime during the early part of 1922 to spacious quarters on the main floor of the Merchants Exchange. Secretary Eugene Smith has started contractors to work and it is expected the new space will be ready about March 1.

Shipments by the barge line for month of December, 1921 were: Wheat, 45,325 bushels, corn, 681,940 bushels. Shipment by barge line for entire year of 1921 were: Flour, 31,660 barrels; wheat, 4,295,710 bushels; corn, 2,639,080 bushels; and oats, 31,090 bushels.

P. P. Connor, an old time member on the Exchange, celebrated his 82nd birthday on January 6. Mr. Connor is hale and hearty and as spry as a youngster. He was warmly congratulated by the entire 'Change, where he is very well known on account of his long association with the old firm of Connor Brothers.

State Marketing Commissioner A. T. Nelson is contemplating the purchase of wireless equipment to send out crop information to Missouri farmers. He has just received an opinion from the Assistant District Attorney that it will be entirely proper for him to expend \$3,000 for this purpose.

Damage to the extent of about \$5,000 was done to the Merchants Exchange on January 5 by a smokestack which broke and fell through the roof of the building. Most of the loss was done by water from the broken sprinkler system. The smokestack, which was 110 feet high and on the roof of the Exchange Building, had been weakened by heavy winds.

K. B. Hannigan, who is very well known on the floor of the St. Louis Merchants Exchange, and by the grain trade in general, has just been promoted from Freight Agent to Assistant Traffic Manager for the Southern Railway. The news will no doubt be received with much enthusiasm by his friends in the grain trade.

Announcement has just been made that the A. W. Schisler Seed Company, St. Louis, was reorganized over a year ago, and the name of the firm has now been changed to the Lawrence Seed Company, under the name with a prosperous organization, instead of one suffering from trade depression. An almost jubilant announcement has just been mailed to the concern's customers and prospective customers.

The following report, recently printed in a prominent St. Louis daily, is of sufficient importance to be quoted entire: "Missouri wheat seeding, began late, on account of unceasing rains in September, and very little was sown before October 1, but continued up to November and even later in some sections. Favorable weather resulted in more planting than was expected October 1."

"The Missouri farm census of 1921, as made by the county and township assessors, whose reports were in for 147,401 farms on November 1, listing actual crop acreages in detail, shows plainly that Missouri farmers are still growing wheat heavily and have not entirely returned to the cropping system used before the world war, when the yearly acre-

age of wheat was around 2,000,000. Most of the seed bed was well prepared and wheat was generally sown under better conditions than usual.

"Dry weather prevented a full germination at first, but more in northern counties than in southern. warm weather brought up practically all of the crop. The wheat acreage has been reduced from last year, but more in northern counties than in southern.

"A large part of the early sown wheat is infested with Hessian fly, and cinch bugs are reported in sufficient number to supply a full crop for the early spring flight. Counties south of Kansas City, on the west side of the south line, have the poorest prospects. Most of the wheat is healthy and vigorous, with good stands, but is less than normal in growth. Missouri wheat went into winter quarters in fair condition. Average state condition is 87 per cent against 90 per cent in 1920, and 89 per cent 10-year average.

"Rye seeding is the same as last year, 25,000 acres condition 90 per cent against 81 per cent last year. Missouri farmers have gone back to pre-war acreage in rye, although some counties where they did not get in the expected wheat acreage, have sown rye in its place.

"Corn gathering is 75 per cent completed, and 79 per cent of the crop is marketable quality, as it was badly affected by winds, and heavy rain storms of September, together with record-breaking damage from earworms, cinch bugs, etc."

KANSAS CITY

B. S. BROWN - CORRESPONDENT

RECEIPTS of grain at Kansas City last year established a new high record by a big margin, due almost entirely to the rush to market wheat immediately after the last harvest. Arrivals of all grain reached the enormous total of nearly 140,000,000 bushels, an increase of 24,000,000 bushels over 1916, the year of the former record. Compared with 1920, there was an increase of 41,000,000 bushels and with two years ago an increase of 35,000,000 bushels. Last year's receipts were about 480 per cent above the average for the past 10 seasons.

Kansas City receipts of grain, in bushels, last year and in 1920 are here shown:

	1921.	1920.
Wheat	110,204,550	70,738,650
Corn	15,495,000	10,813,750
Oats	7,117,900	7,553,100
Kaffir, etc.	4,712,400	6,066,500
Barley	1,657,500	2,461,000
Rye	442,200	893,200
Total	139,629,550	98,526,700

Total wheat receipts, 110,000,000 bushels exceeded the former record made in 1916 by 32,000,000 bushels and were 39,000,000 bushels larger than in the preceding year. Compared with 1918 there was an increase of 60,000,000 bushels. The average for the past 10 years is about 54,000,000 bushels. The movement of the last crop started on an unprecedented scale almost as soon as harvest was under way. In July Kansas City received 19,183,500 bushels, the largest amount ever received in one month and surpassing the former record made in August, 1919, by about 250,000 bushels.

The movement of corn and other coarse grains kept within moderate proportions and did not approach the former records, in most cases dropping a little under the average for the past 10 years.

Liberal stocks of wheat have been held at Kansas City all season, the total generally exceeding 9,000,000 bushels and at present amounting to 10,559,000 bushels. This is the largest of any of the terminal markets. Minneapolis is second with 8,000,000 bushels.

Further declines in prices as part of the reaction from war levels have made the year a memorable one, as they resulted in losses to all branches of the trade and in inadequate returns to producers. The volume of business as shown by the record receipts has been large but it has not been profitable. The record receipts of wheat, for example, have been due chiefly to forced liquidation and have been a factor in depressing prices. At Kansas City the wheat market last November was down to the lowest level in six years, futures selling as low as 90 cents and carlots of choice wheat bringing close to a dollar, a decline of 50 to 75 cents from the high level of the preceding year. The corn market touched the lowest level in more than 15 years. Choice earlots brought as low as 35 cents and at nearby country points there were sales as low as 20 cents a bushel.

The flour output at Kansas City established a new record last year, 4,237,850 barrels, 18 per cent more than in the preceding year and 16 per cent more than in 1919, the year of the former record.

E. W. Wagner & Co. of Chicago and New York, whose failure was announced recently, maintained a private wire office in Kansas City in charge of J.

K. Christopher. The announcement of the financial troubles of the firm came as a surprise to the trade here. The firm had some open contracts in December wheat here, the closing out of which imparted some irregularity to that delivery, but otherwise the market followed the trend at other terminals.

The final session of the Exchange before the adjournment for Christmas and New Year's day marked a revival of the noisy demonstrations that were customary before the war. Trade was practically at a standstill and members kept the hall in an uproar that could be heard for blocks with horns, tin cans, fire crackers and, in the New Year's celebration, firearms. Grain samples were thrown freely. Only one thing was missing to recall the celebration before the war, the throwing of flour.

Total deliveries on December contracts at Kansas City were 722,000 bushels of wheat, 583,000 bushels of corn and 245,000 bushels of oats. The bulk of the wheat 515,000 bushels, was delivered the first day of the month and was promptly ordered out by the mill receiving it, which was little unexpected. In addition to the wheat reported through the clearing house, about a million bushels was delivered by several of the larger elevator concerns through their offices.

James N. Russell, president of the Russell Grain Company, will head the Kansas City Board of Trade in 1922, succeeding Ben L. Hargis. The election was



JAMES N. RUSSELL

only a formality, as the other candidate, W. B. Lathrop, withdrew before the balloting started. Harry Smith of the Federal Grain Company, automatically advanced to the position of first vice-president as provided in the rules. Mr. Russell has held the office of director and first and second vice-president. He was president of the Kansas City Grain Club last year, a social organization, and formerly was head of the Rotary Club.

Interest in the election centered on the second vice-presidency. In this race Allen Logan of the Logan Bros. Grain Company defeated Fred C. Hoose of the Norris Grain Company. The following directors to serve two years were chosen: B. C. Christopher, Charles A. Dayton, W. W. Marshall, William Murphy, N. F. Noland and J. H. Wooldridge. The directors held over from last year are: E. O. Bragg, Fred B. Godfrey, Fred C. Hoose, W. B. Lathrop, W. J. Mensendieck and H. F. Spencer. The Arbitration Committee will consist of Fred L. Bedell, E. F. Emmons, R. A. Jeanneret, J. J. Kraetli and W. H. Marshall.

Due to the numerous legislative measures affecting marketing conditions the past year or so, the position of president of a terminal grain exchange has become one requiring nearly all of the incumbent's time.

Ben L. Hargis, the retiring president, has had the most strenuous administration since the organization of the exchange. The problems arising from the agitation against organized markets and the various legislative measures adopted which affected grain markets, have taken him away from his own office for weeks at a time. He made six trips to Washington, remaining there in all several months, in connection with the hearings and other work re-

garding the Capper-Tincher legislation. There were several to Jefferson City when the Missouri legislature had the bill affecting membership in exchanges under consideration. He devoted several days each to the Kansas, Missouri and Oklahoma State Grain Dealers convention and was in Chicago on numerous occasions to attend hearings and conferences. C. W. Lonsdale also spent many weeks in Washington and traveled thousands of miles attending to the affairs of the Board of Trade.

The Southwestern Millers League will send a delegation to New Orleans January 25 to meet with Gulf steamship operators and representatives of the Shipping Board. General conditions affecting the export trade in wheat and flour will be discussed.

C. W. Lonsdale is a member of the Advisory Committee formed by Secretary Wallace in regard to the grain Future Trading Act. With Fred Wells of Minneapolis and Leslie Gates of Chicago he will represent the exchanges.

The Southwest is still feeling the effects of the congestion that prevailed at Galveston earlier in the season, although the supply of grain held there has been greatly reduced. Selling pressure generally has dominated the market and as a result premiums have followed a lower trend. The main problem for several weeks has been getting rid of damaged wheat. Liberal quantities of good wheat have been shipped to Galveston for mixing purposes and most of the grain there now is able to pass inspection for export loading, but there has not been much demand. No new shipments are being made to the Gulf, except for special purposes. Nearly all the larger export firms had trouble of some sort recently in bringing cargoes up to specified grade and there have been hurried shipments of choice grain.

There has been an unusually large movement of wheat from Omaha to Kansas City recently, several shippers estimating the total for the past month or so at about 2,000,000 bushels. There is a favorable rate from Omaha through Kansas City to the Gulf and points east which accounts for most of the shipments. The wheat generally has been loaded direct from Omaha elevators. Fairly liberal shipments have recently been made from there to be used for mixing purposes at Galveston.

Recent reports that Kansas City elevator stocks of wheat, which now exceed 10,000,000 bushels and are close to the high record of the season, contained an unusually large proportion of low grade or damaged wheat are not borne out by the last available detailed statement of some elevators. Eight of the larger houses, according to the figures, had about 5,723,000 bushels of wheat recently, of which 37 per cent or 2,130,000 bushels was No. 2 or better and the remaining 63 per cent was No. 3 or lower. Much of the lower grade wheat is No. 3 and No. 4. The per cent of damaged wheat which cannot be used advantageously for mixing or other purposes is not definitely known, but it is small, probably not exceeding 5 per cent. Receipts have included a good deal of poor wheat recently and it is natural that it should accumulate in elevators.

There probably is more poor wheat at Kansas City now than is usually held here, but the situation is not conspicuous nor is it any worse than at any other terminals. Two houses are said to hold a little larger proportion of the poor wheat than the others.

The Kansas City Board of Trade, along with other terminal markets that made application, has been designated a contract market in accordance with the recently enacted grain Future Trading Act.

Local firms expect to participate in the sale of corn to the Russian Relief Commission, though this market was out of line when the first few cargoes were purchased. Offers from here will be for Gulf loading. There recently has been an active export trade in corn from Kansas City, one concern loading out nearly 2,000,000 bushels from Texas City in one week.

Indications are that the Interstate Commerce Commission will hasten its decision in the matter of adjusting the flour rates from the Southwest to New York and from Minneapolis to New York, W. R. Scott of the Board of Trade Transportation Department said recently, though it may still be a matter of weeks before the affair is decided. Southwestern shippers are hopeful that a settlement satisfactory to them will be made. The rates were thrown out of line recently when roads out of Minneapolis reduced flour rates east in order to check the movement of wheat via the lakes. The reduction gave Minneapolis an advantage of 8 cents a hundredweight over the Southwest, as compared with 3.7 cents formerly. Under the old rate southwestern mills and shippers were able to compete with Minneapolis in the East, but the 8-cent differential is too much, they contend. At a recent hearing in Chicago, Minneapolis was out in force and showed how the lake move-

ment and other factors were a handicap, while the Southwest was equally strong in protesting against the restrictions that an 8-cent differential would impose.

BUFFALO

ELMER M. HILL CORRESPONDENT

GRAIN receipts at the terminal elevators at Buffalo last year shattered all records with a total of 220,354,916 bushels as compared with 106,145,488 bushels last year and 215,537,169 bushels in 1898, which was the largest previous year. Lying at anchor behind the breakwater is one of the largest fleets of grain carriers ever assembled at any port in the world. At no time during the year were Buffalo elevators congested, because of the rapidity with which modern houses can handle cargoes.

Of the receipts last year wheat totalled 134,610,352 bushels; 40,050,375 bushels of corn; 23,478,121 bushels of oats; 7,660,229 bushels of barley; 8,254,556 bushels of rye and flaxseed receipts totalled 6,301,283 which was an enormous increase over any previous year.

Flour receipts during the year from western mills were, 6,613,369 barrels which was the largest since 1916 when the receipts by lake were 6,957,432 barrels.

Most of the grain receipts at terminal elevators was consigned for export and went forward to the Atlantic Coast by rail but the New York State Barge Canal handled a larger amount of east-bound grain last season than in many years past. This was due in a large part to the larger cargo boats being operated over the state waterway and the lower carrying charges which gives the all-water route from the West an advantage over rail lines.

The total grain movement from Buffalo to New York over the New York State Barge Canal during the year was 12,691,287 bushels as compared with 4,110,214 bushels in 1920 and 3,804,971 bushels in 1919. Of the shipment over the canal last season, the wheat movement was the largest with 7,414,700 bushels. The movement of other grains were, corn, 1,752,571; oats, 2,216,687; barley, 1,214,430 and rye, 92,899.

The receipts of grain during the closing month of the navigation season on the lakes were exceptionally heavy. During the last days of the season it was not unusual to have 3,000,000 bushels of grain arrive in a single day. Ships which brought down late cargoes made big money for their owners as high as 7 cents was paid for storage cargoes. The *J. J. Sullivan* and the *G. A. Tomlinson* probably earned the largest sums for a single down-bound trip in the season. The *Sullivan* of the Hutchinson fleet brought down 355,000 bushels at 7 cents, making \$24,850 for the trip and the *Tomlinson* brought down 328,000 bushels at the same rate and was paid \$22,960 for the trip.

The failure of E. W. Wagner & Co., stock and grain brokers, was a big surprise in the Buffalo grain market. William S. Doyle, local manager of the firm with offices in the Chamber of Commerce, said the announcement came like a bolt from a clear sky. Buffalo customers of the company received this announcement from the Chicago office of the corporation:

"E. W. Wagner & Co., has been in business for 37 years, and we hope liquidation of our affairs will justify confidence that has been placed in us. Unfortunately our business was overextended and our capital became, in the judgment of the New York Stock Exchange authorities, insufficient to assure complete protection to our clients. The business is out of our hands, but we shall render every assistance possible to those in charge. If properly and gradually liquidated we believe our assets will be ample to take care of our obligations."

The opinion among local clients of the firm seemed to be that the firm's difficulties would be found in the grain trade rather than in stocks. It is reported the Buffalo office carried about 150 accounts. These are said to range from \$500 to \$5,000 each. Accounts of Buffalo traders were kept in New York and Chicago and all money deposited to their credit here was sent daily to either one of these offices.

Warner Bates, advertising manager of the H—O Company of Buffalo, has been chosen permanent chairman of the advertising and sales managers' group of the Chamber of Commerce which recently has been organized. Mr. Bates formerly was secretary of the Wholesale Merchants & Manufacturers Association.

With the work in the Buffalo Harbor 90 per cent completed, the balance of the contract will be completed by May, 1922, according to the report of U. S. Army engineers. The completion of the work will mean much to grain carriers entering and leaving

port because of the removal of the shoal area at the north harbor entrance and the enlargement of the turning basin in the inner harbor. The Black Rock and Tonawanda harbor project is 95 per cent complete. Of the total appropriation of \$5,931,978 for this work, the sum of \$207,624 remains to be spent for river and harbor improvements.

Yale Kneeland, secretary of the Electric Grain Elevator Company, announces that the annual meeting of the corporation was held in the offices in the Chamber of Commerce at noon January 5.

Joseph N. Bissette of Winnipeg, a grain merchant, was arrested in Buffalo after a six months' search, on the charge of misappropriating about \$130,000 of the funds of the Adanic Grain Company, members of the Winnipeg Grain Exchange. Detectives who arrested the grain man, said they have searched for him in the grain centers of Canada and the United States. He was returned to Winnipeg for trial.

One of the marine towers of the Mutual Grain Elevator on the Blackwell Canal was destroyed by



WRECK OF MUTUAL ELEVATOR MARINE LEG

the 96-mile gale which swept lower Lake Erie December 18. The photograph shows the mass of twisted steel and corrugated iron covering after the storm had subsided. The damage will be repaired at once.

Of the 49 big grain carriers moored at the outer breakwall with winter storage cargoes, 23 were driven onto the beach and badly damaged in a 96-mile gale which lashed the waterfront late in December. The damage to the grain vessels is estimated at more than \$1,000,000. Marine experts under R. Parry Jones and R. H. Harriman, representing the underwriters and the American Bureau of Shipping, said they never saw such a tangled mess of



GRAIN IN VESSEL STORAGE AT BUFFALO

lake shipping. Many of the boats were jammed into each other with chains twisted and tangled in a most chaotic manner. Most of the boats had to have their grain cargoes lightered before they could be hauled off of the sandy beach. The vessel firm of G. A. Tomlinson & Co., was the heaviest sufferer, no less than 12 of the ships of that line being damaged. The Interlake Steamship Company had five; M. A. Hanna & Co., three; the Kinney Steamship Company, two and H. K. Oakes, one. Several of the boats which were found to be leaking after they had been lightered and floated were forced to discharge their storage cargoes at terminal elevators immediately and go into drydock for repairs.

The east breakwall at Port Colborne was practically demolished by the hurricane. Two grain carriers, the *Laketon* and *Conestota* dragged anchors and were slightly damaged. The railroad tracks leading up to the big Canadian Government grain elevator were washed out so that the unloading of vessels was delayed.

The Inland Rivers & Lakes Transportation Company of Buffalo, announces plans for the establishment at the opening of navigation over the New

York State Barge Canal in the spring of a new line of grain carriers between Buffalo and New York. Models of the barges which the company proposes to build were exhibited at the Great Lakes-Hudson & Atlantic Waterways Association convention. They are of a new type and while designed to carry 500 tons they will draw but five feet of water. This is only one half of what other type barges capable of carrying 500 tons draw. The boats will be capable of high speed without a back-wash which always must be guarded against in canal-size boats.

A cigarette caused a small fire in the Dellwood Elevator on the waterfront last month. The blaze was confined to the locker room 200 feet above the street level, so the firemen had difficulty in extinguishing the fire.

Three men are under arrest charged with robbing the Lackawanna Feed & Grain Clearing House at Lackawanna. About \$1,000 worth of feed and grain was stolen from the warehouse.

Charles Donoghue, a prominent grain merchant of Kingston, Ont., was shot above the heart and beaten with a club by two men who held him up near his home recently. The bandits were frightened away before they could get the \$1,500 which Mr. Donoghue carried. He is expected to recover.

An involuntary petition in bankruptcy has been filed in United States Court in Buffalo against William Walker of Hamburg, Erie County, a retail grain and feed merchant. The petitioning creditors say that a sale on execution of judgment is threatened.

The Shanahan Grain Company of Buffalo has filed papers for voluntary dissolution with the Secretary of State at Albany. Kenefick, Cooke, Mitchell & Bass, attorneys for the corporation, announced that all claims against the corporation should be filed with them at once.

Employees of the Shredded Wheat Company of Niagara Falls were guests of the company at the annual theater party in the Cataract Theater. Many features were introduced to make the event the most successful in the history of the big corporation.

The United States Grain Corporation of Wilmington, Del., through its secretary G. Ray Hall, has brought an action in the United States District Court in Buffalo against The Lewis E. Sands Company of Albion, N. Y., in an effort to recover \$3,756 alleged due on overpayments for grain bought in October, 1918. Overpayments on several shipments are



charged by the United States Grain Corporation. Shattuck, Glenn & Ganter of 42 Broadway, New York, are attorneys for the plaintiff.

The annual meeting of stockholders of the Federal Mill & Elevator Company of Lockport was held in the office of the company in the Lehrmann Building, at 10 o'clock, January 11. E. F. Flinchbaugh is secretary of the corporation.

Liquidation trustees of the American Malt & Grain Company of New York have sold the company's plant in Buffalo for \$500,000 to Minneapolis interests which will be known as the Minneapolis Milling Company. One fifth of the purchase price is payable immediately and the balance next April. The Buffalo plant, with a grain storage capacity of 2,500,000 bushels, located on the Buffalo River with lake and rail connections, is the largest grain elevating unit owned by the company. George W. Martin has been manager of the Buffalo property. This sale leaves the trustees with three more plants to dispose of. Two are in Chicago and one in Milwaukee. The latter is held for approximately \$125,000. It is reported that the trustees of the American Malt &

Grain Company will meet this month when a liquidating dividend will be declared. Last year a dividend of \$7 a share was paid and it is believed the next disbursement will be about the same figure. The enactment of Federal prohibition forced conditions which put the malting company into liquidation. For some time the Buffalo plant has been used merely for the handling and storage of grain. Mr. Martin says it easily could be made adaptable for milling purposes.

* * *

There has been a light demand for feeds in the Buffalo market in the last month. There have been a few price changes but the closing of navigation has had a stabilizing influence on the local market. Early in January Gluten Feed and 36 per cent Cottonseed Meal sold at half a dollar lower a ton. White Hominy dropped 75 cents and the yellow variety 25 cents. Latest price quotations in the Buffalo market in carlots f. o. b. Buffalo in 100-pound sacks were: Gluten Feed, \$41.10@41.30; Cottonseed Meal, 36 per cent, \$42.50@43.00; Cottonseed Meal, 42 per cent, \$47.00@47.50; Oilmeal, 33 to 35 per cent, \$47.50@47.80; Brewers' Dried Grains, \$33.00@33.50; Standard Spring Bran, \$29.80@30.00; Hard Winter Bran, \$29.80@30.00; Standard Spring Middlings, \$29.80@30.05; Choice Flour Middlings, \$35.30@35.60; White Hominy, \$27.55@27.80; Yellow Hominy, \$26.55@26.80.

* * *

Hay prices in the Buffalo market have remained steady throughout the month with little demand. A lowering of freight charges, dealers say, will have a stimulating effect upon trade in western hay. Latest price quotations on track in Buffalo were: Timothy, No. 1, \$19.00@20.00; Timothy No. 2, \$18.00@18.50; Timothy Mixed, \$17.50@18.50; Clover Mixed, \$18.50@20.50.

MILWAUKEE

C. O. SKINROOD - CORRESPONDENT

THE first week of 1922 has opened up with grain trade at a rather low ebb. Total receipts for the first week of the year were 519 cars against 657 cars the week before, 734 carloads a year ago and 893 cars for the same week two years ago. Trade is, therefore, 30 to 40 per cent less than in previous years. The holiday quietness is believed to be a feature of the market and therefore business should gradually recover. The receipts for the past week were made up of 34 cars of barley, 296 carloads of corn, 152 cars of oats, 11 cars of wheat, 13 cars of rye and 13 cars of flax. Considerably more than half of the grain offered for the first week of 1922 was corn.

* * *

Milwaukee made a splendid record in grain trade for 1921, according to figures just compiled in the office of the secretary of the Chamber of Commerce. These indicate that grain receipts for the year were considerably larger than expected with a total in excess of 70,000,000 bushels, the exact figure being 70,521,180 bushels.

In the year 1920 the total receipts of grain at Milwaukee were 56,270,000 bushels, so that 1921 recorded a gain of about 25 per cent over the previous year.

The 1921 grain receipts were made up of 8,903,255 bushels of wheat, 29,900,355 bushels of corn, 19,456,070 bushels of oats, 9,711,045 bushels of barley and 2,560,455 bushels of rye, making a total in excess of 70,000,000 bushels.

These figures indicate that corn alone made up almost one-half of the total receipts, while oats constituted more than 25 per cent of the total supply of grain, testimony of the popularity of the Milwaukee market in these lines.

* * *

The final compilation for the past year showed that the total outward movement of grain from Milwaukee on the lakes also had made a new high record. There were 148 cargoes in all with 31,000,000 bushels of grain in this lake movement, while the total shipments from the city by all routes, lake and rail, were in excess of 51,500,000 bushels.

* * *

Secretary Harry A. Plumb of the Milwaukee Chamber of Commerce says in his annual report that 1921 was an extremely unsatisfactory year in the grain trade despite the big gain in receipts over the previous year. He explains that the business was highly spasmodic with receipts light at times and at other times a rush of grain which taxed the marketing machinery of the Chamber, even when being worked at top speed.

Referring to the heavy shipments of grain from Milwaukee in the past year, Mr. Plumb says that of the 51,500,000-bushel total, about 8,000,000 bushels were wheat, more than 25,000,000 bushels were corn, oats shipments were 14,000,000 bushels, barley almost 3,000,000 bushels and rye over 2,000,000 bushels.

Since corn receipts at Milwaukee for the past year were over 29,000,000 bushels and since about 25,000,-

000 bushels was shipped out, the total consumption by local Milwaukee industries was more than 4,000,000 bushels.

Mr. Plumb points out that never in the history of the Milwaukee grain market has so much grain gone out by water as during the navigation season of 1921. More than half of the total water shipments of 31,000,000 bushels went to the Canadian ports with a total of 17,000,000 bushels, while the total shipments by water to American ports was a little in excess of 13,000,000 bushels. The Canadian shipments were divided among about 10 ports, with the bulk going to Port Colborne, Port McNicol and Goderich.

Milwaukee has made two fine records in cargo loading, Mr. Plumb points out, with the steamer *Harvester* loading the largest tonnage of grain ever loaded at a Lake Michigan port with 432,000 bushels of corn, while the largest number of bushels taken on at any Lake Michigan port was the *John Sherwin* with 459,000 bushels of oats.

Mr. Plumb explains further in his annual report how Milwaukee has been put to a great disadvantage by the 1920 raise in freight rates, a gain of one-third raising the rate of 20 cents to 27 cents. Milwaukee, he says, has been compelled to go farther and farther West for grain, to Nebraska, Iowa and the Dakotas as Wisconsin declined as a grain surplus state. But this long distance marketing is highly difficult with the excessively high freight rates, he argues, so that the grain from distant territory has been deflected to the north in some cases to Lake Superior ports, and in others to the Gulf of Mexico ports on the south.

Milwaukee grain men, Mr. Plumb confidently asserts, expect to get these rate discrepancies remedied and they are also looking forward to the assurance that the St. Lawrence Deep Waterway will help to solve the shipping problems of the Northwest. He concludes:

"We see a vision—1,000 miles east of Lake Michigan where the wide Atlantic will be brought to our very door by the removal of the obstructions in a few miles of tumbling rapids. We see ocean-going vessels discharging cargoes at our own wharves and loading other cargoes for direct passage to Europe."

* * *

Grain in store at Milwaukee at the opening of the new year was 97,000 bushels of wheat in round numbers, 1,465,000 bushels of corn, 721,000 bushels of oats, 190,000 bushels of barley and 17,000 bushels of rye. The chief stores are therefore of corn and oats, with minor holdings of the other grains.

* * *

Among the new members of the Chamber of Commerce is James F. Heffernan of the United States Feed Company. Mr. Heffernan is a former alderman of Milwaukee.

* * *

Wisconsin farmers have increased their area of fall grains to some extent, according to the latest crop reports. These indicate a gain of 54,000 acres in the area of winter wheat and rye, with a total planting of 481,000 acres, as compared with 427,000 acres last year and 465,000 acres in the fall of 1919.

The fall was reported as very favorable for the sowing of winter grains, with abundant and frequent rains in September, and mild weather in October which facilitated getting this work done on time. Both wheat and rye, because of this fine weather and ample snow covering, have entered the winter in excellent condition.

The area planted to winter wheat is estimated at 104,000 acres compared with 99,000 last year and 101,000 acres two years ago. The condition was given at 94 per cent of normal as compared with 91 per cent a year ago and a 10-year average of 93 per cent. The crop condition is therefore one point better than the usual average.

The area planted to winter rye in Wisconsin is given at 377,000 acres as compared with 328,000 acres a year ago and 364,000 acres in the corresponding time in 1919. The condition of the crop is placed at 95 per cent, as compared with 94 per cent a year ago and a 10-year average of 95 per cent. The present condition is therefore exactly the same as the usual average.

The fine condition of winter wheat in Wisconsin—94 per cent, contrasts sharply with the condition of 76 per cent given for the entire United States, while the rye condition for the United States—92 per cent, is just a trifle less than the percentage given for Wisconsin.

* * *

Summary of the crop yields of the state by the Department of Agriculture show that the 1921 oats crop of Wisconsin was largely a failure with an average yield of 24.3 bushels an acre as compared with more than 44 bushels an acre a year ago and 33 bushels an acre two years ago. The harvest of oats was therefore about half of that of the big yield of 1920 with 61,000,000 bushels as compared with 107,000,000 bushels a year ago. The oats price is also far lower than usual with a farm scale of 34 cents a bushel, compared with 49 cents one year ago and 70 cents a bushel in 1919.

The average yield of corn in Wisconsin is placed a little over 44 bushels an acre as compared with 41.9 bushels a year ago and 45 bushels two years ago. The crop was a little under the high yield of 1919.

The price of corn on Wisconsin farms is now given at 48 cents as compared with 77 cents a bushel a year ago and \$1.25 a bushel in 1919.

Barley was also a light crop in Wisconsin in the past year with a yield of only 22 bushels an acre as compared with 31.7 bushels an acre a year ago and 26.5 bushels two years ago. The state's total production was only 10,000,000 bushels as compared with almost 16,000,000 bushels a year ago and 13,700,000 bushels two years ago. The farm price of barley in Wisconsin is given at only 52 cents a bushel as compared with 84 cents a year ago and \$1.21 two years ago.

The yield of rye in Wisconsin was also light with an average of 13.6 bushels an acre as compared with 16 bushels a year ago and 15.8 bushels two years ago. The total yield was only about 5,000,000 bushels as compared with other crops of 7,000,000 to 8,000,000 bushels. The farm price of rye in Wisconsin is now only 69 cents a bushel as against \$1.30 a year ago and \$1.33 average two years ago. The price of rye has been hard hit, as the market was well maintained, higher than other grains, until the crop of 1921 was sold.

The Spring wheat crop of the year was also very light with a yield of a little more than 1,000,000 bushels compared with 3,000,000 bushels a year ago and almost 6,000,000 bushels two years ago when the high prices stimulated production. The farm price of wheat is given at 97 cents a bushel as compared with \$1.54 a year ago and \$2.15 a bushel two years ago.

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The Milwaukee Chamber of Commerce has received notice from Secretary of Agriculture Wallace, that this has been made a contract market and trading in futures will be permissible. Puts and calls have been eliminated and all other rules laid down for the granting of the Federal license have been followed strictly.

* * *

Reductions of 10 to 19 per cent in freights on farm products were effective in Milwaukee at the opening of the year, according to J. L. Bowlus, manager of the Transportation Department of the Chamber of Commerce. The revised schedule, Mr. Bowlus says, will provide a reduction of about 13 per cent in freight rates on wheat and wheat products, a 19 per cent cut in rates on corn, rye, oats and barley, and about 13 per cent cut on hay and straw. The generous reductions made on the various grains are expected by Mr. Bowlus to make enough of a saving to stimulate receipts in some measure. From another source, estimates are made that these cuts in rates mean about 1 to 3 cents a bushel on corn shipped from nearby states and from 3 to 5 cents on points as distant as Nebraska, thus giving the farmer material relief from the high rates.

* * *

The Chamber of Commerce at Milwaukee continued its kindly ministrations at Christmas time. The hat was passed among merchants and more than \$600 raised to provide somewhat more than 100 baskets of food which are given to tuberculosis victims, whose names are provided by the nurses in the City Health Department. This is the same as the work carried on by the Chamber for a number of years.

* * *

A vigorous defense will be made by the Milwaukee manufacturers and dealers in malt, hops and other articles which are used in the making of home brew if the Government insists on proceedings against them. Arthur L. Kleinboehl, secretary of the Fred Miller Brewing Company, says that the company is clearly within its rights in making malt sirup. He asserts that it is not sold to any one who is suspected of intent to use it in the making of illegal beverages.

"Our product is used in a legitimate way by bakers and candy manufacturers as a substitute for sugar," said Mr. Kleinboehl. "We have obeyed the law as far as the manufacture of beer is concerned and we intend to do the same in the manufacture of malt sirup. If the Government can prove that we are wrong in our claims that we have the right to make the sirup, we will acquiesce in the findings cheerfully."

* * *

Milwaukee's City Council has gone on record for direct action by Congress to legalize the sale of wines and beer. The resolution was passed by a vote of 29 to 1. The resolution started to bar out "light" wines and beer, but by another amendment, the word "light" was eliminated and approval was therefore given to the plea of wine and beer of any and all kind. The resolution approving wines and beer was prefaced by a detailed statement of crime and hospital records asserting that conditions have become much worse since the dry era.

* * *

More interest than for many years past is being taken in the state grain show to be held at Green Bay January 24 to January 28. Gov. Blaine and Dean H. L. Russell of the Wisconsin College of Agriculture are among the speakers, who will appear at the show. E. D. Holden, secretary of the Wisconsin Experiment Association, is laying the groundwork for the show and Senator Timothy Burke has been placed in charge of the Committee on Arrangements.

Mr. Holden predicts that this grain show will easily be the greatest one ever held in the state. A special and insistent effort is being made to get Secretary of Agriculture Wallace from Washington to address the exposition. The Brown County Grain Growers' Association is also taking a prominent part in making arrangements for the big show. The crowd attending is expected to be so large that many private homes will have to be opened to provide housing. An attendance of nearly 5,000 is expected by the Green Bay Committee on Arrangements.

Reports at Milwaukee indicate that there is considerable scarcity of rye as mills are paying a premium over the market. The demand is said to be especially good for the Wisconsin rye, which is the quality desired at the Milwaukee, although there is ready sale for all rye now being received.

The Northern Wisconsin Midwinter Grain Show was held at Spooner, Wis., January 4 to January 6. There were corn judging contests, and a long program of talks by experts from the agricultural extension service. The Washburn County Pedigree Seed Growers' Association also met during the midwinter exhibit.

Interest in Wisconsin in the St. Lawrence Deep Waterway route is still at white heat. Gov. Blaine has called a conference of citizens of the state to be held at Madison, January 18, for the purpose of crystallizing sentiment in favor of the St. Lawrence project. In his call to attend, he urges that all civic, commercial and trade organizations send their delegates. The entire conference is designed to work up a strong Wisconsin demonstration for the St. Lawrence route so that it may have some decisive effect in forcing action by Congress on the water way.

J. L. Bowlus, manager of the Transportation Department of the Chamber of Commerce, has scored a signal achievement in making arrangements with the Great Lakes Transit Corporation for a service of eight ships between Milwaukee and Buffalo and other ports. The total tonnage involved is about 40,000. The conference at which the latter was clinched was held with J. C. Evans, president of the steamboat lines. Other ships will be added as required, according to Mr. Evans. He pointed out that this traffic, when discontinued in 1917, amounted to 750,000 tons per year and he predicted that this total will be surpassed with the revival of the service on a highly efficient basis.

DULUTH

S. J. SCHULTE - - - CORRESPONDENT

FAILING unforeseen developments, the present officers, Board of Directors, and committees of the Duluth Board of Trade will be re-elected by acclamation at the annual meeting on January 17. At the nominating caucus the old slate went through without opposition. The only change made was that B. Stockman, manager of the Duluth-Superior Milling Company was nominated for the Board of Directors to succeed J. F. McCarthy, who desired to retire after several years' service. The following were nominated: President, H. F. Salyards; vice-president, G. H. Spencer; Directors, W. W. Bradbury, William Grettum and B. Stockman; Board of Arbitration, G. G. Barnum Sr.; M. M. McCabe, and E. A. Vivian; Board of Appeals, F. S. Lindahl, Thomas, Gibson, and W. J. McCabe.

H. A. Starkey was re-elected president; Frank B. Kellogg, vice-president; G. H. Spencer, vice-president; W. H. Wilson, secretary and J. D. Deighton, assistant secretary of the Consolidated Elevator Company at its annual meeting held at New York.

The Duluth Board of Trade will be represented at the conference at Washington on January 23 called by President Harding to consider measures for the relief of the agricultural community. Grain interests here are of the opinion that little real economic relief through the country can be hoped for as long as farmers, owing to low prices and high costs of transportation, are unable to buy manufactured goods in normal volume. Strong hopes are entertained that means will be found to improve the position of grain growers and cattle men over the Northwest.

A rate for grain shipments to Duluth, which would retain the present competitive scale with Minneapolis millers, is expected to result from a recent hearing at Chicago before the Interstate Commerce Commission. It was attended by the grain interests of the Middle West and the Northwest, the Duluth Board being represented by Charles F. Macdonald, its secretary, and also the chairman of the Duluth Traffic Commission. Attempts by the railroads to put into effect tariffs that would have been advantageous to

Minneapolis millers, brought sharp protests from Duluth, Chicago, Omaha, Kansas City, and from the Southwestern Millers League. A decision in the case is expected to be handed out shortly by the Interstate Commerce Commission. Representatives of Minneapolis millers contended at the hearing that the Duluth lake rate was too great an asset and that its maintenance would prejudice their position as a flour milling center. The railroads had endeavored to make operative a rate of 42 cents on flour and wheat and 40 cents on coarse grains, the rate being made "overhead," instead of adding the rates from Minneapolis to Chicago and from Chicago to the seaboard, as heretofore. The reduction proposed by the roads amounted to 2½ cents on flour; 2 cents on wheat and 2 cents on coarse grains.

Parker M. Paine, member of Logan & Bryan, Chicago, is an optimist upon the grain market situation for a long pull. In the course of a recent visit to the Duluth market, he expressed the opinion that better prices will be made for wheat and coarse grains in the near future. As he sees it the Spring wheat situation in this country is fast getting down upon a domestic basis as a result of the light yields over the Northwest last fall. He commented upon the demand coming from millers and the difficulty being experienced by them in obtaining sufficient good wheat to cover their requirements.

Nothing tangible can be accomplished in the way of bringing about normalcy in the trade situation until some effective plan shall be formulated to stabilize foreign exchange, in the opinion of Julius H. Barnes former head of the United States Grain corporation, who was a recent visitor at his home here from New York, where he is now making his headquarters. He pointed out that fluctuations in foreign exchange are so sharp as to make a difference of 2 cents a bushel from day to day at times. It is therefore the sheerest kind of speculation for a foreign importer to buy grain as he cannot tell what figure grain bought in this country will stand him by the time it comes upon his markets for distribution 30 or 60 days later. For that reason foreign dealers in grain and other commodities are confining their buying to a minimum. Mr. Barnes advises are that supplies of coarse grain, especially corn and oats, are inadequate in European countries, while this country has enormous quantities on hand for which markets cannot be found and that are being offered at ruinously low prices in consequence. He expressed the hope that something would come of the international economic conferences to be held to find a solution of the exchange and other handicaps to free trade relations between the United States and Europe.

Elevator interests and commission men here are counting upon a better movement of wheat, coarse grains, and hay to this market, now that lower freight schedules have been made effective on those products. R. M. White of the White Grain Company, figured out that the 16 per cent freight cut makes a difference on the average of \$1 a ton to the farmer on hay shipped by him to this market, not counting the elimination of \$2.50 a car transfer charge at the terminals here. Illustrating the effect of the reduction, he mentioned that his house is now receiving shipments of Alfalfa from Montana points that could not be moved at the higher rates. He expressed the hope that the entire advance of 40 per cent in freight rates put into effect in August, 1920, would be wiped out in the near future. In his opinion, the farmer will carry a heavy burden until that action has been taken.

F. E. Lindahl, manager of the Cargill Commission Company, expressed regret that the 16 per cent reduction in freight rates had not been put into effect prior to the close of the lake navigation season as the movement from the country would have been greatly stimulated and the credit situation correspondingly helped. As it is, his office is in receipt of better shipping advices from the country, he said.

William Grettum, grain commission man, asserted that dealers had lost out through having bought grain to arrive on the supposition that the railroads would put into effect a cut of 10 per cent in freight rates on November 20 last as per their original offer. The grain shipper prior to that time would have been delivered at the lake terminal in time for delivery in the East on lake shipping contracts, he said.

Active trading developed here in the rye market during the last month, but its price tendency was persistently downward, declining from 85 to 75 cents a bushel. Buying here was practically confined to one elevator house, and the grain bought is understood to be for export shipment at the opening of navigation in the spring.

Charles H. Thorton, a Winnipeg grain operator, was a recent visitor on this market. He expressed the opinion that last season's wheat yield in the three western Canadian provinces was close to 300,000,000 bushels, that view being strengthened by the continued large movement from the country to the ter-

inals at Fort William and Port Arthur. Marketing of wheat up there had been encouraged by the banks and general business interests as a step in relieving economic conditions. Large areas of farm lands were plowed in the Canadian West last fall, and with a heavy influx of new settlers during the last few months the indications are that a record acreage will be seeded up there next spring.

Duluth grain houses with Winnipeg connections are counting upon handling a fair quantity of Canadian wheat at the elevators here between now and the opening of navigation in view of the rapid filling up of the houses at Fort William and Port Arthur. Duluth millers have bought considerable Canadian wheat in the aggregate during the last few weeks on the basis of current quotations at Fort William and at the same time absorbing the duty, payment being made in Canadian funds. The grain has been required by them for mixing purposes in view of the light receipts of Spring wheat on this market. As they figure it out, the imposition of the duty on wheat as provided for in the emergency tariff was not of any benefit to the American farmer, as it forced the Canadian wheat more keenly into European export channels, thus being a factor in lowering its quotations during the rush period. As conditions developed through last summer's drouth, supplies of American Spring wheat of the best grade were found in sufficient to go round among millers, making Canadian importations necessary.

CINCINNATI

HARRY A. KENNY - - - CORRESPONDENT

THE Cincinnati Grain and Hay Exchange resumed operations on the floor of the Exchange Hall of the Chamber of Commerce on January 3, after a three-year separation of the two organizations. The return was without formal celebration, but the move is expected to result in a greater effort of the two organizations in making Cincinnati one of the



HOME OF THE CINCINNATI GRAIN AND HAY EXCHANGE

largest grain and hay markets in the country. Under the agreement by which the transfer was effected the Grain and Hay Exchange becomes an affiliated body of the Chamber of Commerce, the Grain and Hay Exchange promulgating such trade rules as it may deem necessary for the proper conduct of its business. The Chamber of Commerce is to approve the by-laws of the Grain and Hay Exchange insofar as they are compatible with the by-laws of its organization. The Grain and Hay Exchange left the Chamber of Commerce in April, 1918, following disputes as to the right of operation of its inspection and weighing departments and organized an independent exchange in the Gwynne Building, where it has since been located. The inspection and weighing departments of the Grain and Hay Exchange will be

maintained in the Gwynne Building for the present, or until the lease of quarters in the building expires in April.

* * *

Loss estimated at \$20,000 was caused when the grain warehouse of the Cincinnati Grain Products Company, Covington, Ky., was destroyed by fire, the origin of which has not been determined. The fire started in a corner of the warehouse and the inflammable nature of the contents caused it to spread rapidly. Five carloads of grain were placed in the warehouse the day before the fire and together with that and hay and other material in the rear of the building the loss would reach approximately \$20,000. Two heavy motor trucks valued at \$6,500 and a touring car valued at \$500 belonging to the grain company also were destroyed. The company's loss is partly covered by insurance. The warehouse was owned until recently by Reuff Bros. of Covington, who sold their business to the Grain Products Company.

* * *

B. J. Drummond, executive secretary and traffic manager of the Cincinnati Grain and Hay Exchange, has issued the following of interest to hay shippers to this market: "In accordance with tariffs legally filed with the Interstate Commerce Commission the carriers entering Cincinnati impose a charge of \$3 per car on shipments of hay and straw held on the tracks for the purpose of inspection and disposition. So far the Pennsylvania, Big Four, Baltimore and Ohio and Erie Railroads are concerned this charge applies in all cases where cars are held on their own tracks or plug tracks of the Cincinnati Grain and Hay Exchange. On account of the more favorable rules of the Pennsylvania Railroad relating to absorption of switching charges after shipments have been inspected, it is advisable that the shippers to the Cincinnati market utilize this line whenever possible, until such time as other carriers entering the market equalize. Shipments arriving via the Pennsylvania Railroad except when reaching that line at Hamilton are subject to switching absorption that enables the buyers in most cases assuming the \$3 stop charge. This stop charge is uniform throughout the United States and is assessed at all points where cars of hay and straw are stopped for inspection, and is therefore not confined to the Cincinnati market alone. The Cincinnati market is one where the plugging system which has been approved by the Bureau of Markets of the Department of Agriculture as the fairest and best system of inspection in vogue."

* * *

Harrie B. McCullough, 49 years old, president of the J. M. McCullough Sons' Company, one of the largest seed concerns in this section of the country died suddenly at his home, 2712 Cypress Avenue, of a stroke of paralysis last month. Members of his family believe the fatal stroke was due to injuries suffered in an automobile accident about two years ago, when his health was seriously affected and his sight was almost totally destroyed. Mr. McCullough, who was the grandson of the founder of the business bearing the family name, was known far and wide as an expert in seeds. He was a member of the Chamber of Commerce, the Business Men's Club and the Kiwanis Club. He leaves a widow, one son, Robert S. McCullough, who is connected with his father's firm and one daughter, Miss Helen McCullough, a Vassar student, who was at home for the home Christmas holidays.

* * *

A concerted effort is being made to elect Henry M. Brouse, president of the Cincinnati Grain and Hay Exchange, for another term as a director of the Chamber of Commerce, which will hold its annual election the latter part of this month.

* * *

At the annual reorganization meeting of the Hamilton County Agricultural Society last month the following officers were elected: President, J. T. Slater; vice-president, George W. Foster; secretary, D. L. Simpson; assistant secretary, M. A. Hartke; treasurer, W. H. Settle.

* * *

Stocks of grain in first hands in this city on January 7, according to the Bradstreet Company were as follows: Wheat, 184,345 bushels; corn, 278,713 bushels; oats, 214,667 bushels; rye, 3,400 bushels.

* * *

Business methods in the financing and producing of agriculture on the farms of the United States are as necessary as business methods in banking or industry and must be studied in order that competition and realization of the markets of the world may be met by the American farmer, and the complex problems of the farmers in years to come solved by satisfaction of the farmer. Henry C. Wallace, Secretary of Agriculture, told more than 2,000 delegates who assembled in this city at the Music Hall last month for the annual convention of the Ohio Grange. Pointing out that the credit of the American farmer was necessary in order that he might survive the period of depression which, Mr. Wallace said was the most severe this nation has ever experienced so far as agriculture is concerned, it was explained that the War Finance Corporation was created in order that new life might be given to farm projects. Continuing,

Mr. Wallace said that our foreign loan is so large that our debtors cannot even pay the interest on the loan because they have not the gold. The only avenue left open for them, he said, is to pay it in commodities and thus American energy and business will be called upon to compete in markets that heretofore have not interfered with American business life, and we must meet it.

* * *

William B. Riley, manager of the hay department of the McQuillan Company, with headquarters in the Duttonhofer Building was toastmaster at a dinner and entertainment given to Cincinnati newspapermen by Charles M. Dea, Internal Revenue Collector in charge of the Cincinnati district.

* * *

Charles S. Maguire, 80 years old, president of Maguire & Co., who was the oldest active grain dealer in Cincinnati, died at his home at 3904 Floral Avenue, Norwood, Ohio, on December 16. Mr. Maguire, who was born and educated in Cincinnati, engaged in the grain business in 1864 and had offices in the Mitchell Building for the past 45 years. For 17 years, Mr. Maguire conducted a feed store and grain elevator on the Millcreek with A. J. Mullane as his partner. Before entering the grain business, Mr. Maguire was manager of the Cincinnati Street Railway Company and at one time was connected with the Cincinnati office of the Adams Express Company.

Mr. Maguire was very modest and during his entire life was prominent in public and civic affairs. In 1866 and 1867 he served on the Board of Educa-



THE LATE CHARLES S. MAGUIRE

tion as a member from the Sixth Ward. Shortly after he was elected, 16 teachers of the Seventh District School, including the principal, B. O. M. DeBeck, raised \$180 out of their meager salaries in those days and presented Mr. Maguire with a watch which he carried until his death. Mr. Maguire was one of the organizers of the Elks' and Odd Fellows' lodges in this city, but resigned from active membership in 1882, at the death of his first wife. He was chairman of the Finance Committee which raised the funds for the erection of the famous bronze monument in honor of the Odd Fellows' lodge in Spring Grove Cemetery.

Mr. Maguire assisted in organizing the Cincinnati Grain and Hay Exchange on March 6, 1918 and from that time on served on the Board of Directors. He was chairman of the Committee on Rules at the time of his death. He became a member of the Young Men's Mercantile Library, when 15 years old and was one of the oldest members of the Chamber of Commerce, his certificate being number 186. He was a director of the Art Museum during its development.

In October 1891, Mr. Maguire married his second wife, Miss Nina Grace Best. Following the panic of 1893, Mr. Maguire suffering at the hands of a trustee and a valued partner, lost not only what he possessed but many thousands of dollars besides. He bought the home he has since occupied in Norwood in 1897 and less than two years ago, paid out dollar for dollar of his indebtedness. The Maguire home in Norwood was obtained for a mere song and is one of the showplaces in Hamilton County.

Mr. Maguire lived in Norwood for the past 24 years and served a term as councilman-at-large of that municipality during its most desperate financial time. He was responsible in a large measure for the magnificent library which the residents of Cincinnati enjoy. It was through his efforts that the City Council of Cincinnati appropriated \$175,000 for acquiring the Thurman B. Handy Theater on Vine Street, where the library now stands.

On the floor of the Cincinnati Grain and Hay Ex-

change and the Chamber of Commerce the slogan and motto of Mr. Maguire's business life was; "my shipper and I are one; only one difference, my shipper comes first."

On December 11 Mr. Maguire was stricken while at his office, passing away at his home five days later. Members of his family, quoting the attending physicians, say that his death was largely due to lack of rest, as no vacation for 12 years had been possible for this indefatigable worker.

Mr. Maguire is survived by his wife, three daughters, Helen P. Maguire, Corarand Maguire and Mrs. Emma M. Thompson of Denver, Colo., and a son F. R. Maguire of Ashville, N. C., who was at one time associated with his father in the grain business.

Funeral services were held at the residence on December 19 with Mrs. M. C. Stoiber, leader of the Cincinnati New Thought Temple, officiating. Internment took place in the family lot in Spring Grove Cemetery.

LOUISVILLE A. W. WILLIAMS - CORRESPONDENT

THE close of 1921 carries but few regrets in so far as the grain trade of Louisville is concerned, as the year was far from being a good one. Grain on storage in the larger elevators ran into larger quantities as a whole than it did in 1920, when freight rates were against Louisville, and this condition applied for a time in the early part of 1921. However, when freight rates were finally equalized and things ironed out, movement through Louisville increased.

Long time storage picked up in the fall, and for a time holdings of wheat and oats were very fair. Wheat holdings have now been reduced, however. Corn movement has not been heavy. With the jobbers of hay, grain, feed, etc., business was fair, but not heavy, as the country has had fairly good supplies, and local business has slowly dwindled away.

Prospects for the new year as a whole look more promising. Much depends on readjustment of freight rates. The 10 per cent reduction on agricultural products should be followed by other reductions. In reducing rates some inequalities in freight rates will probably result, which will discriminate against various points. One elevator man remarked: "Rates have been scrambled for sometime past, and the traffic offices of the railroads don't know hardly what the rates are. They will quote you a rate and call you back later to tell you that it was the wrong one. This plays havoc where letters or wires have already been sent out. Good traffic bureaus are scarce today, and are needed worse all the time."

The Kentucky Public Elevator Company, reported that business had been fair, but not up to expectations. At the present time there is some movement of wheat and oats, and stocks on hand are about 100,000 bushels below holdings in early December. Right now the company has about 400,000 bushels of grain in its plant. Movement is largely South.

* * *

General conditions are not much different in so far as prices are concerned than they were a month ago. Louisville is paying around \$1.27 to \$1.30 a bushel for wheat. Corn is selling at 55½¢@56 cents a bushel for No. 2 grades, and No. 3 is 53½¢@54 cents. There is no differential at this time between White, Yellow or Mixed. Oats are quoted at 39 cents for No. 3 and 41 cents for No. 2, the latter being scarce.

Hay is fairly firm at around \$21 for top grades, baled hay, carlots, selling at \$21 for No. 1 Timothy, with No. 2 at \$19.50. Mixed, No. 1, \$19; No. 2, \$17. Clover, \$20 for No. 1, and \$18 for No. 2. Straw is \$14 for wheat and oat; and \$16 for rye.

Feed prices continue strong, small production of millfeed making for storage markets. Bran was up to \$30 a ton, but is now quoted at \$28@29, cotton carlots, selling at Louisville. Mixed feed is \$29@30; and middlings, \$30@31. Hominy feed is \$26; cracked corn, \$27.

Flour prices have been very firm over the month, with short patent flour at \$7.85 a barrel, cotton carlots, Louisville; and long patent at \$6.35; with low grades \$4.50½¢ a barrel. The market has shown very little change. With increased crop estimates, and fair growing conditions applying to the new crop, prices are not expected to change materially, unless there is a decided change in the export buying movement. The Ballard & Ballard Company, local millers, reported that for the six months just closed it made and shipped 386,064 barrels of flour, which means 1,853,107 bushels of wheat consumed during the period.

* * *

Williams & Monroe, operating a grain and general brokerage business at 109 South Fifth Street, suspended in December, and later an involuntary petition was filed against the concern. Assets are estimated at \$20,000 and liabilities \$60,000. The firm was forced in 1916, when Harvey Williams, who had

been in the grain business in Chicago, came to Louisville and went in with Herman F. Monroe, who had operated previously as H. F. Monroe & Co.

Edinger & Co., local hay, feed and grain jobbers, reported that business since the first of the year had been slightly better, as stocks in the hands of retailers are light, and buying has been generally larger in view of country stocks running low.

Receipts of hay have been fair as a whole, and are picking up again. River hay was in poor movement for some time as a result of floods in the Ohio River, which stopped the river boats. Much damage was reported to wheat land in bottom country of the Ohio River and its tributaries.

It is interesting to note that Kentucky is going right ahead and growing corn freely despite lower prices. In 1919 she grew \$2,500,000 bushels, while in 1921, \$2,150,000 bushels was reported by the Government estimators. Corn at the present time is hardly worth a third of what it was at the peak, but farmers are raising more livestock, poultry, etc., than during the war period, and making good use of their grain.

Thieves recently forced a safe door at the plant of the Louisville Hay & Grain Company, taking \$221.50 in cash, and making a clean getaway. More than a dozen safes have been tampered with or opened since the first of the year.

Reports on the growing wheat crop in Kentucky and southern Indiana are good, the crop having met with mild weather, and shown considerable progress. Winter plowing has been the largest ever known in the district, which should assure a larger corn acreage than usual in the spring.

Demand from breweries for grain promises to slow down to almost nothing as a result of the seizure of some of the larger local plants by Federal agents. The distilleries are doing practically nothing, there having been a little whiskey made this winter, but very little, although indications are that some beverage stock will be made in the spring.

TOLEDO

C. O. BARNHOUSE - CORRESPONDENT

AT A meeting here on January 4 in which the municipality of Toledo, the Toledo Chamber of Commerce, the Toledo Labor Council and the carriers entering Toledo appeared before a representative of the Interstate Commerce Commission, to represent their various constituencies on the question of the adoption of Eastern Standard time by the Toledo carriers, the matter was fully heard and at the close of the meeting it was stated that the record of the proceedings would be placed before the Commission who would probably render a decision in a few weeks.

Alphonse Mennel, president of the Mennel Milling Company, is spending the winter in Florida.

Harry Devore, Ralph Williams and Bob Burge, champion nimrods of the Exchange, spent a couple days' rabbit hunting in the game preserves, southwest of here recently, but as no invitations to a rabbit dinner were forthcoming on their return the presumption is that they were out of luck.

M. H. van den Berg, representing the Cumberland Seed Company, of Cumberland, Md., and E. A. Nicholas, of the Birkmeyer Grain & Seed Company, of Great Falls, Mont., called on the seed trade recently.

Col. E. L. Southworth and Raymond P. Lipe attended the Board of Trade election in Chicago, January 9.

Harry Winters, of Thomson & McKinnon, Chicago, was a guest of John C. Husted recently.

C. S. Coup, of The Northwestern Elevator & Mill Company, visited New York City and other eastern points in the interest of his firm not long ago.

Fred Jaeger and Kent Keilholtz spent a couple days in Chicago last week.

The incorporation of the Randolph Grain Company, capitalized at \$25,000 was announced on the floor of the Exchange, January 4. The incorporators are O. W. Randolph and C. W. Mollett of Toledo and Earl D. Bloom of Bowling Green. Messrs. Randolph and Mollett have been members of the Toledo Produce Exchange for several years. Mr. Randolph is president of The Central Elevator Company and The Randolph Grain Dryer Company, and Mr. Mollett

is secretary and treasurer of The Central Elevator Company and manager of The Lake Erie Milling Company. The new firm is thus closely affiliated with The Central Elevator Company, which has a storage capacity of 200,000 bushels and all the necessary equipment for the expeditious handling of grain.

F. A. Hasselkuss, of Elmore, R. G. Russell, of Malinta, Frank Parrott, of Ellery, Edgar Thierwechter, of Oak Harbor, Rush Croninger, of Grand Rapids, Frank McManus and William Ludwig of Findlay, Jacob Lebin, of Chicago, D. J. Lloyd, of Waterville, Eli Short, of Stryker, J. E. Aungst, of Hudson, and Arnold Raabe of Ft. Recovery, visited members of the Produce Exchange recently.

Campbell Meeker, of Columbus, has come to Toledo to manage the local office of Meeker & Co., at 509 Madison Avenue, vice John R. Bozman, who has gone to Florida for his health. Claude Whitney continues as assistant manager.

Walter S. Snyder and Herbert R. Wilson, under the firm name of Snyder & Wilson have leased quarters at 412 Madison Avenue, where they will conduct a general brokerage business in stocks. Mr. Snyder is a member of the New York Stock Exchange and contemplates the acquirement of a Chicago Board of Trade membership in the near future. Messrs. Snyder & Wilson have just returned from a trip to New York City where they made arrangements for wire service and personal representation on the floor of the Stock Exchange.

Application for the appointment of a local receiver for E. W. Wagner & Co., whose office at 517 Madison Avenue was closed following the appointment of receivers in New York and Chicago, was made by Roy Rodemick, who makes claim that the failed firm is indebted to him to the amount of about \$1,000. Judge Killetts of the United States court here took the matter under advisement. Gaymor & Kealy, the attorneys in the action, say that they expect many of the 300 other creditors of the firm to join in the suit.

The election of officers of the Produce Exchange held on Monday, January 9 resulted as follows: For president, Kenton D. Keilholtz; first vice-president, Richard S. Sheldon; second vice-president, Jesse D. Hulbert; secretary, Archibald Gassaway; treasurer, Geo. D. Woodman; directors, Harry R. Devore, W. A. Boardman, Cyrus S. Coup, John C. Husted, Fred Mayer, David Anderson, Fred O. Paddock, Frank R. Moorman, John Wickenhiser and Frank W. Annin. Committee on Arbitration: J. A. Smith, L. A. Mennel, J. W. Luscombe, Jr., E. A. Nettleton, Fred W. Jaeger, Henry Hirsch, H. W. Applegate. Committee on Appeals: S. L. Rice, O. H. Paddock, R. L. Burge, G. J. Rudd, P. M. Barnes, G. A. Kreagloh, W. E. Stone, J. A. Streicher, L. J. Schuster, C. E. Patterson and H. O. Barnhouse.

NEW YORK

G. K. TRAFTON - CORRESPONDENT

THE construction of the additional floor on the roof of the Produce Exchange Building has made such good progress that many of the new offices are already occupied. An especially desirable suite, consisting of three large light offices, has been taken by the Flour Committee of the Exchange. By this change the committee secures much more space and greatly improved light for the conduct of their important work. One large room is occupied mainly by a huge oval table around which meetings are to be held of the Flour Committee or of other Exchange committees in case of emergency. Chairman Piper and Chief-Inspector Bedell are to be congratulated upon their much superior quarters.

At this writing the indications are that the Luncheon Club, which was largely responsible for the construction of the additional floor, will shortly take possession of their quarters, which are probably unexcelled by those of any other similar organization in the city.

C. Sommer-Larsen, who has been for several years identified with the export grain trade, latterly connected with the old house of Milmine, Bodman & Co., Inc., has severed that connection and gone into the grain brokerage business on his own account.

In keeping with the annual custom, the huge trading floor of the New York Produce Exchange was dedicated on the last day of the old year to the great Year-End Entertainment which is looked forward to so eagerly by several thousand poor children living on the lower end of Manhattan Island. For several days the members had patiently endured the inconvenience caused by the erection of long rows of circus seats, being well repaid by the evi-

dences of keen enjoyment displayed by the many young guests who took their places after 1 o'clock, when business was suspended as usual on that day. The customary varied program was arranged, including a military band, trained animals, fancy skaters, acrobats, jugglers, and clowns. Last but not least, a real Santa Claus appeared in full regalia at the end of the show and presented each child with a package containing various gifts. As has been the case for a number of years, this important part was played by the genial George W. Blanchard of the North American Grain Company.

William Riemschneider, who has been an active figure in the export grain trade for over 30 years, has announced that the business in the future will be conducted under the name of Wm. Riemschneider & Co. He has taken into partnership his nephew G. W. Riemschneider who has been in his employ several years.

Jacob A. Lenhardt, representative in this market for the Duluth-Superior Milling Company of Duluth, who recently resigned his associate membership in the New York Produce Exchange, has been elected to regular membership.

Members of the grain trade on the New York Produce Exchange read with interest recently the announcement that their old friends E. F. Rosenbaum and E. S. Rosenbaum of the Chicago Board of Trade had participated in the formation of a new firm, Dean, Onativia & Co., who will conduct a commission business in investment securities, bonds, cotton, grain and provisions.

Robert Kjarsgaard for a number of years engaged in the grain trade on the New York Produce Exchange, latterly with the Transatlantic Brokerage & Export Company, severed that connection on the first of the year and has gone into the export brokerage business on his own account.

Elmer G. Porter, grain and produce merchant of Caywood, N. Y., has been elected to membership in the New York Produce Exchange.

George E. Cathcart, an old and popular member of the local grain trade, who several years ago started the firm of Cathcart & Co. in the Winnipeg market, recently visited his old friends in this city. He has opened an office in the Produce Exchange Building, which will be managed by Wm. K. White, an old-time member of the trade, formerly of the firm of Gale & White, and identified with the United States Grain Corporation during the war.

Brinkley Evans, formerly representative on the New York Produce Exchange for the Sun Grain & Export Company, has severed that connection and gone into business on his own account as a grain export broker.

The firm of Martin B. Jones & Co., grain and feed merchants on the New York Produce Exchange, has been discontinued and been succeeded by M. B. Jones & Co., Inc. The change was made largely to take in E. S. Quinn, a son-in-law of Mr. Jones, who has been in his employ about a year.

George H. Baston, formerly assistant manager of the flour department of the Commercial Union of America, has been elected to membership in the New York Produce Exchange where he will act as flour buyer for P. N. Gray & Co., Inc., having succeeded C. H. Sparks in that capacity.

Bernard V. McKinney, active for many years in the local grain trade, and Cecil W. Wilson, recently a member of the firm of Howser & Wilson, have formed a partnership to conduct a grain brokerage business under the name of McKinney & Wilson.

The firm of Howser & Wilson, grain brokers on the New York Produce Exchange, was discontinued by mutual consent on the first of the year.

Leonard C. Isbister has returned to his old stamping ground—the New York grain market—and has applied for election to membership in the Produce Exchange, having become a partner with Howard R. Howser and J. B. Howser in the newly formed grain brokerage firm of Howser & Co. Before the war Mr. Isbister was connected with the old grain exporting firm of Smith & Miller. After serving with the Naval Reserve during the war he returned to the grain trade as manager of the Baltimore office of the Bolle, Watson Company. Subsequently he became affiliated with the old firm of Dennis & Co. in that market.

Among the recent important changes in the grain trade was the formation of a new corporation entitled Buckwheat, Feed & Grain Corporation. The prime mover in the formation of this new concern was Franklin L. Lewi who was elected president, H. R. Forster is vice-president, Robert B. Gentles, secretary and John A. Kemp, treasurer. It will be observed that this new incorporation is closely af-

affiliated with the old and prominent grain commission house of Milline, Bodman & Co., Inc. In short, Mr. Forster is one of the officers of the latter concern, Mr. Kemp is the son of William H. Kemp one of the chief officers of the same company, while Mr. Gentles has also been one of the managers of the export department. Notwithstanding the facts described Mr. Lewi will continue to conduct the grain department of Theodore P. Huffman & Co. John A. Kemp has applied for membership in the Produce Exchange.

J. L. Ravenswaay has severed his connection of some years standing with G. Schilperoort, New York representative of Van Stolk's Commissiehandel of Rotterdam and Amsterdam.

The Board of Managers of the New York Produce Exchange have issued notice to the effect that representation on the Exchange floor has been denied to the Hormel Milling Company of Austin, Minn.

John H. Hamilton, for many years identified with the grain trade on the New York Produce Exchange, latterly as representative for Shearson, Hammill & Co. of New York & Chicago, is now connected in a similar capacity with the local office of James E. Bennett & Co. Mr. Hamilton takes the place of F. E. Andrews, who will have charge of the stock and bond department of the firm in the offices opened in the Produce Exchange Building.

Among the late December and early January visitors on the New York Produce Exchange, were the following well known members of the Chicago Board of Trade: Alfred T. Martin of Bartlett Frazier Company, commission merchants; W. P. Anderson of Wm. P. Anderson & Co., grain receivers and shippers; F. J. Thatcher of the Updike Grain Company; John E. Bellot, commission merchant; Charles H. Klein, broker; and Wm. C. Bliss, broker.

Members of the Produce Exchange, and especially those in the grain trade, were much gratified to hear that their old friend and fellow-member Robert McDougal had been elected president of the Chicago Board of Trade. Mr. McDougal has long been well known by grain dealers, and notably during the time he was a member of the grain commission house of Knight & McDougal.

PHILADELPHIA

T. A. SIEBER - CORRESPONDENT

ACCORDING to the monthly report of the statistician of the Commercial Exchange, the stock of grain in public warehouses in Philadelphia on January 3 was: 2,771,834 bushels wheat, 150,056 bushels corn and 186,802 bushels oats, as compared with 2,659,222 bushels wheat, 143,343 bushels corn and 204,436 bushels oats on December 1 and 1,814,888 bushels wheat, 57,177 bushels corn and 296,055 bushels oats on January 3, 1921. Receipts of grain at Philadelphia during the month of December, 1921, were: 6,691,529 bushels wheat, 818,840 bushels corn, 226,978 bushels oats, 227,189 bushels rye and 16,673 bushels barley. Exports from this port during the month of December, 1921, were: 4,133,253 bushels wheat, 617,840 bushels corn and 173,055 bushels rye.

New memberships in the Commercial Exchange have been petitioned for during the past month by Charles Schaal's Sons, Southern Steamship Company, A. B. Lippincott and A. D. Trexler's Sons.

Emil D. Sanner, of Shamokin, Pa., recently bought the business of the Yocum Sons & Co., dealers in flour and other products at Reading, Pa., for \$40,000.

The grain, lumber and coal business of the Marion Warehouse Company is now conducted under the name of the Marion Elevator Company, located at Marion, Pa.

Account of accumulation the Philadelphia & Reading Railway has issued Embargo No. 5610 on all shipments of flour and feed consigned, reconsigned or to be reconsigned to H. S. Reidler, Doylestown, Pa.

The Thatcher Manufacturing Company has been granted a charter under the laws of Pennsylvania to manufacture feed mixing machines with a capital of \$25,000. The incorporator is Allen C. Fried of York, Pa.

According to the Bureau of Crop Estimates, Department of Agriculture, the preliminary figures of the area of winter wheat sown in the autumn of 1921 in Pennsylvania was 1,405,000 acres, which is 3 per cent more than the revised estimated area sown in the fall of 1920 or 1,364,000 acres. The condition on December 1 was 95 per cent normal against 93 per

cent on December 1, 1920, and a 10-year average of 93 per cent. The preliminary figures of the area of rye sown in the autumn of 1921 in Pennsylvania was 192,000 acres, which is 2 per cent more than the revised estimated area sown in the fall of 1920 or 188,000 acres. The condition on December 1 was 96 per cent normal against 94 per cent on December 1, 1920, and a 10-year average of 93 per cent.

Samuel H. Young, grain and feed merchant, has returned to his office in the Bourse after being confined to his home for about two weeks by illness.

The Commercial Exchange has adopted the National Trade Rules governing transactions in feedstuffs and has appointed a committee on feedstuffs consisting of Wm. B. Stites, M. F. Raringer, Waldo O. Fehling, Clarence W. Wagar and Samuel F. Scattettrgood. These rules have recently been adopted by the Millers National Federation, Grain Dealers National Association, American Corn Millers Federation, Minneapolis Chamber of Commerce and other similar organizations and will probably be followed by others which will make the trading in feedstuffs uniform throughout the country.

Ploughing at Christmas time was a sight which was witnessed all over Lehigh County, Pa., where farmers said there was very little frost in the ground and the heavy rains at that time made conditions favorable for ploughing that ordinarily would have to be postponed until the following spring.

The annual Lehigh County corn show closed on December 20 and Congressman Fred B. Gerner carried off the highest honors for the largest ears on exhibition.

John McGuigan, Jr., formerly eastern manager of Taylor & Bournique Company of Milwaukee, is now connected with the firm of E. L. Rogers & Co. in the Bourse.

John B. Millen and William B. Stites, grain merchants, have returned to their offices in the Bourse after spending several days duck hunting at New Gretna, N. J.

George A. Wenz, manager of the feed department of Woolman & Co., has returned to his office, having gone to Buffalo to meet his brother Charles, thence to Bridgeburg, Canada, where they visited their old homestead.

The Delmar Company has been granted a charter under the laws of Delaware to engage in the business of elevating, storing and warehousing grain and other merchandise with a capital of \$100,000.

The Rooms & Fixtures Committee of the Commercial Exchange, having had authority from the Board of Directors to set aside the Floor Rules, on Saturday, December 31, a dance was held on the floor by members of the Exchange and their friends from 12:00 o'clock noon to 3:00 p. m. The dance was a success due to the effort of Frank J. Montmore of the Philadelphia Export Company.

The new building of the South Jersey Farmers' Exchange, Woodstown, N. J., of which A. B. Lippincott, now proposed for membership in the Commercial Exchange, is manager, was completely destroyed by fire on the morning of December 26. The building, together with its contents of fertilizer, seed and thousands of barrels of potatoes was completely destroyed by the flames. The loss is estimated at about \$50,000 covered by insurance.

Lancaster County is shown by a summary of the staple crops of Pennsylvania to be leader in four, wheat and corn among them, while York is second in three and Berks in two, according to the Bureau of Statistics, Department of Agriculture. Lancaster County has a crop of 5,285,693 bushels of corn and 2,491,037 bushels of wheat. York has 4,207,342 bushels of corn, 1,643,840 bushels of wheat and 1,106,140 bushels of oats, while Berks has 2,916,576 bushels corn, 1,575,016 bushels of oats, 1,184,671 bushels of wheat and 319,269 bushels of rye.

According to a contract signed by the Mayor of Philadelphia J. Hampton Moore, a display for the purpose of spreading abroad the advantages of the Port of Philadelphia will be made of scenes on the Delaware River including locations in Pennsylvania, New York, New Jersey and Delaware. The contract is with the Stanley Advertising Company and the pictures are to be displayed in different cities at a cost not to exceed in the aggregate \$2,250.

Increasing spread of the Japanese beetle, a serious crop insect, in Pennsylvania and New Jersey has necessitated an extension of the area under Federal quarantine, the Federal Horticultural Board, United States Department of Agriculture, recently announced in making public a revised notice of quarantine effective January 1. The total area is increased from 90 to 275 square miles, two classes of quarantine

areas being established depending upon whether or not they are heavily or lightly infested. "The possibilities of danger by the Japanese beetle," declared Dr. Charles L. Marlatt, chairman of the Federal Horticultural Board, in discussing the quarantine action, "have probably not been fully realized, but this insect undoubtedly is bound to be one of the major crop pests of the country. It is fully realized by the state and Federal experts associated in the effort to control this newly imported pest that from the very nature of the insect and its habits it is impossible to prevent its natural spread of several miles yearly by any reasonable restrictions that are possible of enforcement or any reasonable expenditures of money. All that can be done, therefore, we believe, is to prevent by such quarantine measures as appear to be practicable spread by wide jumps or long-distant movement with products originating in the infested area." The insect was introduced into the United States about 10 years ago with an importation of iris roots from Japan, and thus far has been found only in Pennsylvania and New Jersey.

The number of cars unloaded at the Girard Point Elevator during the month of December, 1921, was 2,177 wheat, 362 corn and 83 rye; at Port Richmond elevator, 1,823 wheat, 24 corn, 9 oats, 17 rye and 10 barley; at Twentieth Street elevator, 13 corn, 45 oats and 3 rye; making a grand total of 4,566 cars.

New tariffs of the Pennsylvania Railroad and Philadelphia & Reading Railway become effective January 15, 1922, whereby charges for drying grain at the Girard Point and Port Richmond Elevators will be equalized with those now in effect in Baltimore, Md.

The following is a list of the new charges for drying grain (in addition to the elevation charges):

WHEAT	CENT
No. 1, 2 and 3 wheat.....	$\frac{1}{2}$
No. 4 wheat.....	$\frac{3}{4}$
No. 5 wheat.....	.01
Sample wheat—drying for higher grade.....	$.01\frac{1}{2}$
Sample wheat—drying for sample grade.....	$.01\frac{1}{2}$

CORN	CENT
No. 1, 2 and 3 white, yellow or mixed corn.....	$\frac{1}{2}$
No. 4 and 5 white, yellow or mixed corn.....	$\frac{3}{4}$
No. 6 corn.....	.01
Sample corn—drying for higher grade.....	$.01\frac{1}{2}$
Sample corn—drying for sample grade.....	$.01\frac{1}{2}$

OATS	CENT
Sample oats	$.01\frac{1}{2}$

RYE	CENT
No. 3 rye.....	$\frac{3}{4}$
No. 4 rye.....	.01
Rejected rye	$.01\frac{1}{2}$

All loss of weight to be borne by the owner of the grain.

The above rates will be charged upon the weight of the grain after being dried.

The rates charged for drying will be in addition to the rates for transportation.

All grain to be dried is to be under the control and supervision of the Inspection Department of the Commercial Exchange.

The companies do not guarantee to dry grain within any specific time or to any moisture degree and will not be responsible for deterioration of grain due to delay in passing through the drier.

Grain ordered through the drier will be handled as promptly as possible, taking its regular turn according to the date the order for drying is received at the elevator office.

A meeting of the Commercial Exchange for nominations for officers and directors will be held on the floor, Saturday, January 21, 1922, at noon, in accordance with Article III of the By-Laws. Nominations will include the offices of president, vice-president and treasurer, to serve one year; and six directors, to serve two years; all to be voted upon at the ensuing election, to be held on January 31.

NEWS FROM NORTHERN OHIO

BY T. J. CUNNINGHAM

Kenton reports that early sown wheat in Hardin County was found to be heavily infested with Hessian fly.

A farm near Fostoria was recently appraised at \$5,967. This same farm had once been previously appraised at \$8,190, but as no bids could be obtained at that valuation, it was ordered re-appraised.

The aged mother of Harley T. Asbury, manager of The Sneath-Cunningham Company's elevator at Tymochtee, Ohio, was buried at Sycamore, December 15. She was 81 years of age.

The root and ear rot fungi threatened the Ohio corn crop, according to Prof. Clayton, of the Ohio State University. From tests so far made, the indications are that possibly half the seed corn in the state, and perhaps throughout the corn belt, is infested with the fungi. Samples from all over the state were used in the tests made. Corn was used which had not been subjected to freezing temperature, and over half the corn has shown weak seed-

lings, discoloration, rotting and death of kernels. The infection may sometimes be detected by discoloration at the butt or tip of the ear, the two points of entrance of the fungi, but in nine cases out of 10 there will be no external indications.

Officials of the Ohio State Grange, in convention at Cincinnati recently, in commenting upon the transportation rates, said that an Ohio granary bought a car of corn in 1917, freight on it being 9 per cent of the purchase price, while when it bought a car recently, the freight was almost 90 per cent.

In an address delivered before the Columbus Chamber of Commerce, December 14, Roger W. Babson said, with reference to farm products: "A year ago, wheat was selling for \$2.50 a bushel, corn at \$1.60 a bushel, and other products of the farm at correspondingly high prices. All at once the crash came and to-day the farmer is the bluest man in the country. Farm products were the eighth great industry to be hit, and will be the eighth to recover."

Extensive improvements which have been under way at the Monnett Elevator Company's elevator, at Monnett, Ohio, are now completed, and the elevator is in excellent shape to handle the trade. All the bins have been hoppers and changes made so that the grain can be cleaned as it is taken in. In addition, a modern dump has been installed as well as a new 10-ton Fairbanks scale which can accommodate trucks of large capacity. The grain department of the company is handled by The Sneath-Cunningham Company of Tiffin.

An implement company at Bucyrus, in opening a new sales room recently, treated their visitors to corn pone meal ground and baked on the premises.

The State Department of Agriculture recently compiled reports, showing that managers of farmers' co-operative elevators in Ohio receive an average salary of \$1,696.97 a year, or \$141.41 a month. The individual salaries range from \$1,000 to \$4,800 a year.

The Farmers Grain Association of Ohio will hold its annual meeting in Findlay, February 22 and 23. A corn show will also be held at the Farmers and Merchants Institute, February 15 and 16.

In speaking before the Seneca County Farm Bureau at Tiffin, December 20, C. A. Dyer, legislative representative of the Ohio Farm Bureau, told his audience that marketing, not production, is the chief problem which confronts the farmer of today. There was nothing in his address, however, in the way of a specific plan for solving the problem.

Several flocks of wild geese were observed flying south over Tiffin, recently. No one could remember having seen geese traveling south so late in the year before, and it was generally conceded that they would be late in returning. In other words, chances of an early spring have gone glimmering.

Charles T. Miller has bought the Superior Hay & Grain Company's elevator at Montpelier, Ohio.

Courtney Cunningham, secretary of The Sneath-Cunningham Company, Tiffin, has had as his guests during the holidays, L. T. Dow and family. Mr. Dow is connected with the Davenport Elevator Company, Davenport, Iowa.

The new elevator of Wm. Gregg & Sons, Upper Sandusky, opened for business on January 10.

On December 26, A. A. Cunningham, president of The Sneath-Cunningham Company was operated upon for appendicitis. The case was a very serious one, peritonitis having already developed, and only slight hopes were entertained for his recovery. Mr. Cunningham, however, rallied quickly from the operation, and present indications point to his complete and speedy recovery.

Although farmers in this section have been talking of reducing their oats acreage, it is doubtful if it will amount to anything but talk. The weather conditions this fall were so nearly ideal for ploughing that an immense amount of ground has been gotten ready for immediate sowing in the spring, and few farmers will be able to resist the temptation to get their oats in early.

On January 16, the Farmers and Grain Dealers Association of Ohio, representing several hundred co-operative elevators, will have a recess meeting at Fostoria.

Corn is coming forward in larger quantities; but the price is not attractive, and only those who need the money badly are selling at this time.

The growing wheat crop, in this vicinity, is bare of cover, but does not seem to be injured in any way. Of course, it no longer appears thickly matted on the ground, as the blades of the plant shriveled some with the frost, giving it a thinner appearance.

In low spots, patches of ice still remain, and it is possible that the wheat under this has been hurt to some extent. The tax-paying period has brought some wheat to the elevators, but the movement is very slight.

The Sneath-Cunningham Company, Tiffin, Ohio, now operates the grain department of the Friedley Bros. Elevator at Carrothers, Ohio. At present, the motive power is derived from gas-engines, but as soon as arrangements can be made, motors will be installed and the plant operated electrically. The hay business will be continued by Friedley Bros. as formerly.

The following is taken from *The Sun*, of Sydney, Australia, a paper received recently from a friend there:

Up to November 7, the total value of the wheat shipped and sold locally by the Australian Wheat Board, was £183,981,000.

The total quantity of wheat handled by the Wheat Board for the same period was 639,217,000 bushels. Of this, 348,253,000 bushels had been shipped as wheat, and 62,990,000 bushels as flour, while 204,078,000 bushels had been sold locally. Shippers held 11,991,000 bushels, and millers 2,707,000 bushels, while 9,198,000 bushels were credited to "Stocks adjustment."

The Wheat Board is not functioning any longer, and another item in the same paper commenting upon it reads:

"It is reported in grain circles that most of the Indian business in new season's wheat has been coming to South Australia, and farmers here are reaping the benefit of an earlier season, compared with New South Wales and Victoria. This is one of the advantages of free market conditions."

GRAIN NEWS FROM BOSTON

BY L. C. BREED

At a special meeting of the Grain Board, recently called for this subject, the National Trade Rules Covering Transactions in Feedstuffs were considered with a view to taking action on the same. There was a prolonged discussion with the result that finally the rules were adopted. A committee, however, was appointed to consider Rule 17. It was shown in the proceedings, that in the voting, the rules were favored by most of the brokers acting for western shippers, while, on the other hand, the local wholesale houses were not in favor of the entire program as outlined by the U. S. Feed Distributors Association.

The Executive Committee of the Grain Board elected Warren G. Touey, chairman, and Herbert L. Hammond, vice-chairman, to serve during the ensuing year.

There has, since December 1, been a large increase in the receipts here of grain for export. They comprise around 1,500,000 bushels of wheat, mostly bonded Canadian shipments via Montreal; 200,000 bushels of oats and 40,000 bushels of barley. Some of this grain was destined for Holland, but most of it was for Grecian ports.

The younger members of the Chamber having entered into a scheme for a New Year's revel, pulled off the same on the old-time plan of pelting each other with samples of flour and grain on the floor. For an hour or more, the fun was fast and furious. According to the janitor, the waste of perfectly good foodstuffs was considerable. Stenographers from the various offices witnessed the "proceedings" in safety from the balcony. The brokers later reaped a harvest, and many of the boys had to patronize the clothes pressing and cleaning shops.

Hon. H. C. Wallace, Secretary of Agriculture, recently made an address before the members of the Chamber, as its guest, for the purpose of giving his views on the problems confronting the nation in regard to the future welfare of the agriculturists. His address was a careful and extended review of existing conditions and included a series of suggestions for their improvement. Chief among these, were better credit conditions for the farmer, further reduction of freight rates on agricultural products and Federal supervision of such institutions and establishments as public stockyards, market agencies and grain exchanges.

NEW AGRICULTURAL TARIFFS

The first of the tariffs in which the railroads made the 10 per cent reduction on the products of the range, farm, garden and orchard, says the *Traffic World*, reached the public files of the Commission December 28. They were marked as having come to the Commission in the mail of December 24. That meant they came some time while the Commission's offices were closed to the public from noon, December 24, to the morning of December 27, when the accumulated mail was sorted and distributed, so that that part of the public depending on the files of the Commission for official information was not afforded an opportunity to ascertain the mechanical method by which the carriers intended carrying out their promise to make such a reduction until that day.

An entirely new scheme of publishing rates was

disclosed when the bundles of tariffs were opened. Instead of thousands of identical supplements to be attached to as many tariff publications, each agent and each road that files its rates individually, to accomplish this reduction, will file two supplements. By means of one supplement, all the rates on products of the farm, orchard, garden and range in tariffs specified in the tariffs listed in that supplement are bodily lifted from the tariffs and suspended for six months from January 1, that is, to July 1, 1922. The tariffs on the face say that the rates in the tariffs listed covering the articles carried in attached lists shall stand suspended for a six months' period from January 1.

The second publication is a master tariff containing tables showing what the new rates will be on the articles mentioned in the first mentioned tariff. The tables are exactly the same as in the supplements issued in the 15 per cent case and Ex Parte 74, except that the percentage is different.

In the tariff listing the commodities on which the reduced rates are to be applied, and listing the tariffs in which existing rates are to be found, reference is given to a joint issue of master tariff, known and described as Boyd's I. C. C. A-1250, Countiss' 1100, Curlett's A-66, Fonda's 122, Gilbert's 113, Hawkes' 3, Kelly's 1178, Leland's 1504, and Speiden's 599, with expiration date June 30, 1922. The master tariff states that, effective January 1, 1922, rates then in effect on commodities listed in supplements to other tariffs which make specific reference to this tariff are reduced to the rates shown in column B on pages 4, 5, 6, etc.

The scheme looks simple. In one tariff it is set forth that the rates on certain commodities named therein, to be found in tariffs also mentioned, shall be suspended for six months—from January to the end of June—and that from and after July 1 the rates thus suspended shall be again in effect. This tariff tells the man who is looking for the new rates to consult such and such tariffs issued by well-known tariff publishing agents, such as Boyd, Countiss, Kelly, Curlett, Leland, etc. The names of all the agency publications are set forth on each agency issue, so that all the inquirer need do, to be officially advised as to what rate he is to pay, is to pick out the tariffs carrying the present rates and then take the single supplement giving the new tables of rates.

The 15 per cent Ex Parte tariff publication consisted of a rate table supplement to be attached physically to every tariff and supplement. In this case, the attachment to such a rate table supplement will be made by appropriate reference to a joint publication of that table of rates.

The scheme was good enough to pass the scrutiny of the tariff men of the Commission. That, of course, does not mean that if it is discovered hereafter that that is not a compliance with the law, or with the rules of the Commission prescribed under authority of the law, the Commission will be estopped from directing the carriers to make changes therein.

The New England railroad decided to make the 10 per cent agricultural reduction because they found it difficult to make interterritorial rates to take care of the reductions outside of New England. They were also subjected to criticism for not joining with the railroads in other parts of the country in extending relief to agricultural interests. The New Haven was the first to decide that the money that might be obtained by holding rates steady at the existing level would not be compensation for the trouble in making properly limited tariffs and answering criticisms resulting from failure to join in the 10 per cent reduction.

RATES ON ALFALFA FEED, ETC.

The Commission has condemned the proposal of the carriers, made in schedules suspended on I and S. 1408, opinion No. 7290, 64 I. C. C. 613-4, to withdraw Alfalfa feed, cane seed, cottonseed cake and meal, dried beet pulp and other grain and grain products, from the list of articles taking corn rates, in Western Trunk Line territory, and including them in the list of articles taking wheat rates. The condemned schedules are to be canceled on or before January 28.

TRANSIT ON GRAIN

A finding of undue prejudice and an order to remove it have been recommended by Examiner P. F. Gault in a report on No. 12880, Dean Mill Company vs. Missouri Pacific et al. The complainant alleged that the failure to accord transit on grain and grain products originating on the Mobile & Ohio between St. Louis and Cairo, and destined to Louisiana points, was unreasonable and unduly prejudicial, because transit was accorded on such traffic originating between St. Louis and Cairo on the Missouri Pacific. The examiner agreed that there was undue prejudice and recommended its removal.



CANADA

A big addition is to be built to the elevator of the Grand Trunk Railroad at Montreal, next summer.

The R. B. McLean Company of Winnipeg has leased the Merchants Elevator at Fort William, Ont., and has taken possession of it. The elevator has a capacity of 40,000 bushels and has a large drying capacity.

The Goderich Elevator & Transit Company of London, Ont., has plans under way for the erection, during the early part of this year, of structures which will enable it to handle 100 additional cars of grain daily. Its present plant has capacity of 100 cars. John I. A. Hunt is president of the firm.

THE DAKOTAS

The Great Western Grain Company has closed its elevator at Tower City, N. D.

Al Davis is no longer manager of the Farmers Elevator Company at Fryburg, N. D.

The elevator at Beach, N. D., is being operated under the management of Leonard Towberman.

T. L. Ryan is succeeded as manager of the Farmers Elevator at Winner, S. D., by Frank Woodring.

B. F. Hanna has been succeeded by C. H. Riley as manager of the Farmers Co-operative Company located at Shindler, S. D.

The Atlas Elevator Company at Cavour, S. D., is under the management of A. H. Schultz. He was formerly with the Farmers Elevator Company at Iroquois.

The Farmers Elevator at Peever, S. D., has been reincorporated. Ten thousand dollars have been subscribed by business men and farmers of the vicinity for reorganizing the company.

The Farmers Elevator at Richardton, N. D., has been shut down for the season. Nearly all the grain in that vicinity has been sold, and the directors of the elevator expect a dull winter.

MINNESOTA AND WISCONSIN

The Farmers Elevator Company will erect in the spring a new warehouse at Gully, Minn.

The Equity Elevator at Glenville, Minn., was closed down for the season on January 1.

The Equity Co-operative Exchange at Hitterdal, Minn., closed down its elevator on January 1.

The Cannon Falls Farmers Elevator Company at Cannon Falls, Minn., has increased its capital stock to \$10,000.

The Isanti Co-operative Produce Company of Isanti, Minn., has completed a new 10,000-bushel elevator there.

The Brevik Elevator Company at Lockhart, Minn., is succeeded in business by the Farmers Elevator Company.

The Banner Grain Company of Minneapolis has purchased the business of the W. H. Price Grain Company of Olivia, Minn.

The Belview Farmers Co-operative Association of Belview, Minn., has reopened its elevator there for business. Robert Parker is manager.

On January 1, the Ulen, Minn., Equity Farmers Elevator was closed down. Lack of business was given by the directors of the company as the cause.

The Hopkins, Minn., elevator of the Pacific Elevator Company has been purchased by Daniel F. O'Leary. He is doing business under the name of the D. F. O'Leary Company.

The Fairmont Farmers Co-operative Elevator Company and the Fairmont Farmers Shipping Association of Fairmont, Minn., have consolidated. The merger will be completed by March 1.

The name of the Watson Produce Company, operating at Watson, Minn., has been changed to that of the Watson Elevator Company. The capital stock of the firm has been increased from \$10,000 to \$50,000.

C. P. Coy, Joseph D. Bassine and H. W. Keyes have incorporated at Green Bay, Wis., as the Green Bay Grain & Feed Company, capitalized at \$20,000. The firm will do a general business in buying and selling grain, feed, hay, produce, etc.

The Rosenbaum Bros. of Chicago have purchased the grain elevator at Winona, Minn., formerly owned by the Gould Elevator Company. The ele-

vator, which has been closed for a year and a half, has a capacity of 300,000 bushels. Plans have been made by the Rosenbaum firm to make the elevator a storage point for corn from southern Minnesota and the Dakotas.

The Farmers Grain Company has been incorporated at Stephen, Minn. Incorporators include F. A. Green, J. J. Sinclair, William Merdink, John H. Merdink. Mr. Green was elected first president. The company is capitalized at \$50,000.

The Smith Milling Company of Wilwaukee, Wis., has increased its capital stock to \$150,000, to accommodate the development of the business. Sidney M. Smith is president. The company operates a feed mill and grain elevator there.

The Delmar Company has been organized at Minneapolis, Minn., to handle the cash grain business of the Armour Grain Company. The firm will operate the Delmar Elevator at Minneapolis, which was recently made "regular." William G. Kellogg is president, and R. S. Stephans, vice-president.

IOWA

Byron Sweet on January 1 took over his duties as manager of an elevator at Dows, Iowa.

The Farmers Grain Company of Nevada, Iowa, has overhauled its elevator located at that place.

A grain elevator is to be erected this spring, it is expected, by Edgington & Walsh of Pioneer, Iowa.

The Farmers Elevator Company of Ireton, Iowa, is being conducted under the management of J. W. Adams.

W. W. Azeltine is succeeded as manager of the Galt Co-operative Grain Company of Galt, Iowa, by W. W. Maywald.

The elevator of the Farmers Co-operative Grain Company at Yetter, Iowa, has been improved with new scales and dump.

The elevator of the Walnut Milling Company of Walnut, Iowa, has been leased by A. L. Hagelberger. He will operate it.

Albert Arenson is now manager of the elevator at Knierim, Iowa. He has been manager of the Wadleigh Elevator, but resigned and is succeeded by Albert Owann.

On December 1 Al Orban resigned as manager of the Plymouth Mill Elevator at Oyens, Iowa, and is now taking a much needed rest. He is succeeded by Vincent Freymann of LeMars.

The Farlin Elevator Company has been incorporated at Farlin, Iowa, to buy and sell all kinds of farm supplies, etc. Harry Greiner will be secretary and O. F. Stream president of the corporation.

INDIANA

J. Edwin Lewis of Lansing, Mich., has purchased the Hungate Elevator at Knightstown, Ind.

The Granger Elevator Company is building an addition to its elevator at Mishawaka, Ind.

The Sawyer Grain Company has purchased and will operate the grain elevator at Tab, Ind.

T. I. Ferris is no longer connected with the Steuben Grain Company of Pleasant Lake, Ind.

The preferred capital stock of the Crete Elevator Company of Crete (Lynn p. o.), Ind., has been increased to \$50,000.

John N. Wise is no longer manager of the Farmers Elevator at Frankton, Ind., but is succeeded by H. J. Nading of Flat Rock.

Paul Mitchell is succeeded in management of the elevator and mill of the Farmers Co-operative Company at Brazil, Ind., by Will Scharf. Mr. Mitchell is now at Clay City, Ind.

At auction, Variet Shoemaker and Roscoe Shroyer purchased the grain elevator at Daleville, Ind. It was part of the estate of the late J. P. Shoemaker. Consideration was \$6,200.

Syler & Syler of Napanee, Ind., purchased at receiver's sale the farmers elevator at North Manchester, Ind. The consideration was \$10,100. The elevator was the first co-operative grain elevator in Wabash County.

The Tippecanoe Farmers Co-operative Elevator Association has obtained an option to purchase the elevator of Born & Co., at Lafayette, Ind. The option expires February 1. The Born elevator

company is one of the oldest in the state, but the buildings are modern and equipped with grain drying apparatus.

A new poultry supply and seed building is to be erected at South Bend, Ind., for the Grange Elevator Company.

Newton Busenbark of Crawfordsville, Ind., purchased at receiver's sale the grain elevator and mill owned by the Farmers Elevator Company of Jamestown, Ind. Mr. Busenbark also owns elevators at Hazelrigg, North Salem, New Market, Barnard and Crawfordsville.

A No. 8 Bowsher Crusher with an 18-inch French Burr Mill, together with sheller, cleaner, etc., has been installed at Odon, Ind., for Brady & Flint. A small addition has also been erected to its building for storage purposes.

The capital stock of the Farmers Grain Company of Union Township, Ind., Evansville, Ind., has been increased from \$5,000 to \$10,000. Joseph F. Schenk is president; James W. Anthony, treasurer; Clarence Kuester, secretary.

OHIO AND MICHIGAN

A warehouse is being erected at Coleman, Mich., for the Farm Bureau of that place.

W. L. Trevary succeeds A. Bettinger as manager of the Celina Equity Exchange at Celina, Ohio.

The retail grain and coal business of Mrs. C. B. Smith at Moline, Mich., has been sold by her.

A new elevator is to be erected at Hamilton, Mich., for the Hamilton Farm Bureau Association.

F. S. Stiles is succeeded in the retail grain and coal business at Davisburg, Mich., by R. W. Pepper.

The firm name of the Gidding Bros. at Octa, Ohio, has been changed to that of the Octa Grain Company.

The Brookville, Ohio, elevator of the Klepinger Bros. has been sold to Bert Schlientz, who has assumed charge.

J. F. Edmonds succeeds H. H. Reusch as secretary of the Freeport Farmers Elevator Company at Freeport, Mich.

The elevator of the Superior Hay & Grain Company at Montpelier, Ohio, has been purchased by Charles T. Miller.

The Farmers Co-operative Company has purchased the retail grain and coal business of J. S. Ellis at McCords, Mich.

M. Griffith & Son are succeeded in the retail grain and coal business at Climax, Mich., by the Climax Milling Company.

H. P. Clouse, H. J. DeBont, N. C. Gest and D. H. Graven have incorporated at Milford Center, Ohio, as the Ohio Grain Company.

The Jackson Center Grain Company has purchased the elevator at Jackson Center, Ohio, formerly owned by A. L. Briggs.

W. H. Hochstetler is succeeded as manager of the Farmers Elevator & Exchange Company at Mount Cory, Ohio, by W. O. Smith.

A new lumber shed is to be built at the Rose City Elevator Company's plant at Rose City, Mich., this year. W. J. Cumming is manager.

A warehouse and elevator with round steel bins have been completed at Hemans, Mich., for the Farmers Co-operative Elevator Association.

The business at Marine City, Mich., which was formerly owned by the New Haven Elevator Company, has been purchased by Jay Baldwin.

The elevator at Lansing, Mich., formerly conducted by M. Langebacher is now conducted by his brother-in-law as the Lansing Grain Company.

A warehouse at Charlevoix, Mich., has been purchased by the Charlevoix Co-operative Association. The company will handle grain and hay, with E. J. Shapton as manager.

The Houghton Milling & Elevator Company has overhauled its plant at Houghton, Mich. Electricity and new machinery have been installed. The plant has been put into operation.

Don Bridgeman of Jackson, Mich., has purchased the entire interest of J. W. Marks Company of Jackson, Mich. He has been connected with the Stockbridge Elevator Company for some time.

The Coleman Elevator Company and Hursh & Son of Coleman, Mich., have consolidated and will operate as the Coleman Elevator Company. The

firm is incorporated, capitalized at \$50,000. R. H. Hursh is president; J. E. Curtice, treasurer; and B. R. Simons, secretary and general manager.

Will H. Barnard of Constantine, Mich., has purchased the grain elevator at Moorepark, Mich. He may also purchase the elevator at White Pigeon, Mich. Both are excellent points for buying and shipping grain.

The boiler in the plant of the Troy Grain & Supply Company of Troy, Ohio, is being repaired and a new radiator is being installed in the drier. A manlift and ear corn loader will be installed later. J. G. Williams is manager.

EASTERN

R. H. Davenport has purchased the retail grain, hay and coal business of S. L. Davenport, his father, at North Grafton, Mass.

The Hagerstown Grain Exchange has been organized at Hagerstown, Md. The formal election of officers, etc., is still to take place.

To elevate, store and warehouse grain and other merchandise, the Delmare Company was organized at Delaware. Its capital stock is \$100,000.

Probably a grain elevator will be erected this spring at Washington, Pa., for the Farmers Milling Corporation. A. A. Lacock is manager.

The retail grain, coal and lumber business of the Marion Warehouse Company at Marion, Pa., has been purchased by the Marion Elevator Company.

The wholesale grain and feed business at Hobart, N. Y., which for the past five years has been conducted by E. A. Hutchinson, has been purchased by Robert B. Thompson.

Howard W. Parmenter is president and William F. Smith treasurer of the Wayland Grain Company, which has been incorporated at Wayland, Mass. Its capital stock is \$25,000.

To deal in grain, feed, lumber, coal, ice, etc., the Smith-Pearsall Company was incorporated at Hartford, Conn., capitalized at \$200,000. The incorporators are: Howard M. Guernsey, S. F. Westbrook, Harry E. Pearsall and Ernest Walker Smith.

The American Malt & Grain Company's plant at Buffalo, N. Y., has been purchased by the Electric Steel Elevator Company of Minneapolis, Minn., for a consideration of \$500,000. This sale leaves three more plants to be disposed of by the trustees of the company.

ILLINOIS

The Farmers Elevator Company at Woodland, Ill., has been equipped with electricity.

The Youngstown Elevator Company of Youngstown, Ill., is under the management of A. J. Moulton.

The retail grain and coal business of Holmes Hagaman at Holcomb, Ill., has been purchased by Robert P. Sheaff.

A corn crib of 12,000 bushels' capacity is being built to the elevator of the Radford Grain Company of Radford, Ill.

One of the L. J. West Elevators at Glenavon (Weedman p. o.), Ill., has been purchased by P. E. Fletcher. He will operate it.

The elevators at Wilburn and Gibbs' Spur, Ill., have been sold by Roland Ellis to Ernest Crank. Possession was given January 1.

Two wireless outfits have been purchased by the Bush Grain Company of Tuscola, Ill., and will be installed in the immediate future.

The Walton Co-operative Elevator Company of Walton, Ill., is the successor to the Walton Equity Exchange. Capital stock is \$25,000.

R. E. Reising is succeeded as manager of the Farmers Grain, Lumber & Coal Company at Thomasboro, Ill., by Albert L. Schaede.

A 20-horsepower motor and sheller drag have been installed by the Villa Grove Farmers Elevator Company of Villa Grove, Ill. G. T. Banick is manager.

The Funks Grove Grain Company of Funks Grove (McLean p. o.), Ill., will make a change in its motive power and will use a motor or a gas engine.

The elevator of the Township Line Grain Company at Evans Station (Lincoln p. o.), Ill., has been completed. P. F. McAllister & Co., had the contract.

A new concrete driveway has been completed at the Penrose Elevator Company, Welland (Mendota p. o.), Ill. The office and elevator have also been painted.

The National Elevator Company's elevator at Camargo, Ill., has been purchased by D. C. Speelman. With Mr. Speelman will be associated Mr. Hale of Camargo.

J. E. Hamman has bought the interests of Victor Dewein in the Dewein-Hamman Company of Decatur, Ill., and has consolidated with Harrison, Ward & Co., of Bloomington. The firm has offices at Bloomington, Peoria, and Clinton, and 13 country

elevators in connection with transfer house at Decatur, Ill. They will operate as Harrison, Ward & Co. D. M. Cash remains at the Decatur office.

Miller & Woodcock of Decatur have purchased the holdings of the Chestervale Farmers Grain Company of Chestervale, Ill. The farmers company has retired from business.

To deal in grain, feed, flour, etc., the Carterville Milling Company has been incorporated at Carterville, Ill. The incorporators are: B. E. Mitchell, W. S. Burkhardt and L. S. Colp.

The Lane Co-operative Grain Company of Lane, Ill., is now being conducted under the management of W. L. Lane of Clinton. Mr. Lane has operated at Lane, Craig, and Clinton.

Electric light and power have been installed for the Scarboro Elevator Company of Scarboro, Ill., and a 400-ton coal house erected and equipped with conveyor. W. H. Herrmann is manager.

C. E. Douglas and B. H. Heaton have purchased the Newman, Ill., plant of the National Elevators Company. It has a large oat storage house with capacity of 100,000 bushels, and a large crib holding 50,000 bushels ear corn.

Oscar Berg is succeeded as manager of the Farmers Grain & Stock Co-operative Company of Wyand, Ill., by A. O. Halbert. The farmers' company has storage capacity of 50,000 bushels, and handles stock and implements.

Logan Coleman has purchased the elevator at Bolivia (Mechanicsburg p. o.), Ill., controlled by the Stengler Estate. The house was sold to settle the estate and has been operated under lease by the Farmers Grain Company.

The Hindsboro, Filson and Kemp, Ill., elevators of the National Elevators Company, have been purchased by Dr. T. G. Wells and Fred Wells of Arthur, Ill. They are contemplating purchasing other plants from the same company.

Work is practically completed on the new elevator at New Canton, Ill., for the M. D. King Milling Company of Pittsfield. P. F. McAllister & Co., of Bloomington had the contract. The elevator has capacity of 18,000 bushels.

MISSOURI, KANSAS AND NEBRASKA

A grain elevator at Clifton, Kan., has been purchased by J. P. Coats.

The elevator of George H. Young at Marsland, Neb., is to be improved this spring.

The Hord Elevator Company's new elevator at Chapman, Neb., is nearly completed.

The Farmers Elevator Company of Ewing, Mo., has equipped its plant with a truck scale.

A 10-ton truck scale has been installed in the elevator of C. W. Glynn at Sturgeon, Mo.

Art F. Fleming is in charge of the Farley Co-operative Elevator Association at Farley, Mo.

H. E. Langevin is succeeded as manager of the Farmers Elevator Company at Curtis, Neb., by E. E. Dillman.

Jack Kelley has been chosen to succeed F. O. Spear as manager of the Farmers Elevator at Tecumseh, Neb.

The Farmers Elevator Company at Unadilla, Neb., is being conducted under the management of G. B. White.

The elevator and store at Doniphan, Kan., formerly owned by Jim Clark, has been purchased by Hitt & Reeves.

The late Frank Taylor is succeeded as manager of the Farmers Elevator Company of Almena, Kan., by C. W. Howland.

A new office and warehouse have been completed at Stratton, Neb., for the Farmers Grain, Livestock & Supply Company.

The elevator at Burr, Neb., is now the property of A. B. Wilson. The elevator was formerly operated by G. K. Petring.

The Farmers Union Mercantile Company of Pender, Neb., has doubled the capacity of its elevator. F. V. Uridil is manager.

A modern elevator is to be erected at Belleville, Kan., for the Konovalske Bros., whose elevator burned some weeks ago.

William Maseman has resigned as manager of the Farmers Elevator at Avoca, Neb. He is succeeded by James Johnson.

The elevator of the Associated Mill & Elevator Company at Clare (Olathe p. o.), Kan., has been purchased by E. W. Schlaegel.

A new warehouse has been built at Falun, Kan., for the Farmers Union Co-operative Grain, Livestock & Mercantile Company.

The capital stock of the Mahan Milling & Elevator Company at Centertown, Mo., has been increased from \$10,000 to \$20,000.

The elevator of the Farmers Union Co-operative Association at Crab Orchard, Neb., is to be overhauled. John Offel is manager.

The Rock Island Elevator at Kansas City, Mo., has been leased by the Davidson Mill & Elevator

Company. It will be converted into a feed grinding and corn milling plant. The remodeling is expected to be completed by February 1.

Grant Harmon has purchased the warehouse of the Equity Exchange at Elkhart, Kan. The company also disposed of its merchandise and business.

Norman Fike has purchased the two elevators at Price, near Sabetha, Kan., from A. D. Robinson of Sabetha. Mr. Fike has been running the elevators.

J. A. Milton, T. J. Oakley and John Dunlop have incorporated at Parker, Kan., as the Parker Farmers Co-operative Exchange. Its capital stock is \$10,000.

The grain elevator of William Shute at Santana, Kan., has been purchased by G. G. Davis of Alden. Mr. Shute intends to open a brokerage office at Dodge City.

To deal in grain, feed, coal, farm machinery, etc., the Farmers Elevator & Mercantile Company has been incorporated at Edmond, Kan. Its capital stock is \$25,000.

Four concrete grain tanks are under construction at Mulvane, Kan., for the Mulvane Co-operative Union. A feed mill will also be built and ready for operation by February 1.

Capitalized at \$25,000, the Silver Lake Grain Company has been incorporated at Silver Lake, Kan. W. D. Faulkner, F. A. Barney and C. C. French are interested. The company will buy and sell grain.

Plans are being made by the Florissant Valley Co-operative Elevator Association of Anglum, Mo., for the erection of a warehouse at Anglum and an elevator at Sands, before next July. The warehouse will have a capacity for 5,000 bushels.

The building in St. Louis, Mo., originally the grain elevator of the J. B. Buss Milling Company, has been purchased by the Annan-Burg Grain & Milling Company. The latter firm has been occupying it as a flour blending plant for 15 years.

The elevator of the Seaboard Milling Company at Atchison, Kan., has been purchased by Theo. Nass & Son. The new owners will operate the elevator temporarily as a feed mill, but will eventually enter the grain business. C. Nass will manage the elevator and feed department.

SOUTHERN AND SOUTHWESTERN

A corn crusher has been installed by H. & C. Zedler of Luling, Texas.

A new addition has been built to the elevator of the W. C. Cowan Grain Company at Tulia, Texas.

The elevator of the Great West Mill & Elevator Company at Higgins, Texas, is undergoing improvements.

The property of the A. H. Gibbons Grain Company at Altus, Okla., has been purchased by Spain & Flood.

The Tonkawa Co-operative Association, Tonkawa, Okla., is installing a 30-horsepower motor, clipper and cleaner.

An office has been opened at Tulare, Ga., by R. E. Farthing of Oakland. He will operate as the Tulare Grain Company.

A grain elevator is to be built at Ponca City, Okla., for the Ponca City branch of the Oklahoma Wheat Growers Association.

The capital stock of the Jacksboro Mill & Elevator Company of Jacksboro, Texas, has been increased from \$30,000 to \$60,000.

The elevator of the J. C. Mytinger Grain Company at Dodsonville, Texas, has been sold by it to J. B. Stevenson, who will operate it.

Charles A. Jones has incorporated at Birmingham, Ala., as the Charles A. Jones Flour & Grain Company. Its capital stock is \$100,000.

G. N. Nance, C. A. Harvey and I. P. Downing have incorporated at Granite, Okla., as the Farmers Co-operative Exchange. Its capital stock is \$50,000.

D. K. and D. J. Rutledge and C. E. Johnson have incorporated at Oklahoma City, Okla., as the Western Grain Company. Its capital stock is \$5,000.

W. A. Gough and L. E. Grace have organized at Birmingham, Ala., as the Dixie Brokerage Company. The company will handle grain and feeds.

W. N. Fletcher, and James B. Langston have organized as a partnership at Guynon, Okla., and will operate as the Fletcher Grain & Grocery Company.

Brent & Co., Inc., is the corporate name of the Chas. S. Brent & Bro. of Paris, Ky. The business will be conducted as heretofore, handling grain and field seeds.

Phelps W. Walker of Littlefield, Texas, has purchased the business of the H. G. Tolbert Grain Company and will continue as the Walker Grain Company. The company has an elevator at Littlefield.

A large concrete grain elevator has been completed at Memphis, Tenn., by Embury E. Anderson, dealer in grain and grain products. In 1916 he built a two-story elevator and warehouse, but at that time made his foundations so that in the future he might build the elevator to 10 stories, a

thing which he has now done. The elevator has a capacity of 80,000 bushels. Adjoining the elevator is a brick corn shelling and drying plant.

A wholesale brokerage business in corn, oats, hay and mill products, at Columbia, S. C., is being conducted by B. B. Cooner & Co., recently located at Memphis.

Reports state that J. L. Thomason of Lakeland, Fla., has made arrangements for the erection of a large wholesale and retail grain warehouse at East Palmetto.

An increase of \$15,000 was recently made to the capital stock of the Clark-Lynn Grain Company of Texarkana, Texas. Its capital now amounts to \$60,000.

The Loebe-Gray Distributing Company of Birmingham, Ala., is succeeded by Loebe, Gray & Adams. The company carries a complete line of grain, hay, feed and flour.

To sell grain, feed, millfeed, hay, etc., the Shelbyville Feed & Produce Company has been organized and opened for business at Shelbyville, Ky. John Geoghegan is manager.

C. C. Bierman, W. F. Williamson, J. W. Farrington, T. E. Amyz and F. G. Baldwin have incorporated at Hollister, Okla., as the Hollister Co-operative Grain Company. Its capital stock is \$25,000.

The grain elevator of J. J. Daring at Dothan, Ala., is to be enlarged. The capacity for handling grains and feed is to be doubled. A flour mill for manufacturing self-rising flour will be installed later on.

Capitalized at \$100,000, the Farmers Warehouse & Marketing Company has been organized at Waco, Texas. Plans are being made to erect a warehouse to care for next year's grain and cotton crops.

S. M. Davis, R. M. Smith, and J. R. Hudson have filed articles of incorporation at Rule, Texas, as the Smith Grain Mill & Elevator Company. Its capital stock is \$15,000. The company will conduct a general milling business.

The elevator of the Gallagher Grain Company at New Richmond (Sandstone p. o.), W. Va., which burned on November 23 is to be rebuilt by them. Work will begin about April 1. During the winter the company will handle grain, but will not store it.

W. M. Cosby is succeeded as president of the W. M. Cosby Flour & Grain Company of Birmingham, Ala., by J. C. Hodges. Mr. Hodges has been vice-president of the company. Mr. Cosby, who started in business in 1887, has retired from active business.

Sherman M. Durrett, manager of the Durrett Flour & Grain Company at Fort Smith, Ark., has resigned and is succeeded by W. D. Graves. Mr. Graves was formerly in the brokerage business at Mansfield, Ark., and later was manager of the Western Grain Company at Fort Smith.

The buildings of the Roberts Grain Company at Memphis, Tenn., have been purchased by the Memphis Cotton Seed Products Company, which was recently organized at Memphis. The new owners will erect an additional building and install new machinery and equipment for its oil mill.

The interests of R. D. Pierson and C. A. Johnson in the grain and coal business at Woodward, Okla., have been purchased by the Brubaker Grain Company. The business was conducted under the name of the Brubaker-Pierson-Johnson Grain & Coal Company. D. D. Brubaker is in charge of the new firm.

Lester Stone & Co., dealers in grain, of Amarillo, Texas, have under consideration the erection of a storage and handling house at Amarillo of possibly 100,000 bushels' capacity. They have already secured 1,000 feet of trackage on the Santa Fe for the site, but the wheat crop in the Panhandle is in such poor condition that they are not entirely decided whether to go ahead with the building.

WESTERN

On January 5 the Equity Co-operative Elevator of Hobson, Mont., closed down its grain handling business.

Capitalized at \$10,000, the Sunset Milling & Grain Company with offices at Denver, Colo., has been incorporated.

A 30-foot extension is being built to the warehouse of the Molson Union Elevator Company of Molson, Wash.

A wholesale grain business has been started at Hillsdale, Wyo., by W. H. Edwards under the name of the Edwards Grain Company.

The grain terminal elevator at Seattle, Wash., has been leased by the Gray-Rosenbaum Grain Company. The lease expires December 22, 1922.

Business has been discontinued by the O'Bryant Grain Company of Baker, Ore. J. F. O'Bryant has opened an office as dealer in carload lots.

According to reports, the Northern Warehouse & Brokerage Company of Helena, Mont., is contemplating taking over the property of the defunct

Montana Grain Growers Association. The purchasing company was one of the largest creditors of the grain growers association.

A new 50,000-bushel elevator is being erected at Eden, Idaho, for the Farmers Milling Company. D. G. Wilson is president and manager of the firm.

The Harshman-Sweet Brokerage Company succeeds M. Harshman & Son, in the grain, feed and flour business at Seattle, Wash. C. W. Sweet is manager of the Bozeman Milling Company of Bozeman.

The McCormick Company of Montana was incorporated, capitalized at \$250,000, by W. J. McCormick, Phil H. Barnes, J. D. O'Donnell of Billings, Mont. The company will deal in wheat and other grains and operate a grain elevator; and

handle agricultural implements and also buy and sell as commission merchants.

W. R. Stiles has sold his interest in the Stiles-McCoy Company at Montesano, Wash., to his partner, C. M. McCoy. Mr. Stiles will remain with the company as field representative.

The Kenworthy Grain & Milling Company of Tacoma, Wash., has purchased the property of the Farmers Feed & Supply Company at Centralia, Wash. T. E. Francis will manage the local business.

A controlling interest in the elevator and flour mill at Laurel, Mont., has been purchased by S. M. Thornton. F. G. Neville retains his interest in the mill. The capacity of the elevator is 50,000 bushels; the capacity of the mill is 150 barrels daily.

FIRES-CASUALTIES

New Richmond, Wis.—The Farmers Elevator Company's elevator was burned recently.

Wright, Kan.—On January 2 fire destroyed the Farmers Elevator here with loss of \$8,000.

Rose Hill, Iowa.—A loss of \$16,000 was sustained when the seed house of N. M. Grizer burned.

Kirwin, Kan.—On December 14 fire damaged slightly the interior of the Farmers Elevator located here.

Texico, N. M.—Fire destroyed the Bacon Feed Store, with over 4,000 bushels of grain. It was a total loss.

Studley, Kan.—The elevator of F. D. Walters was totally destroyed on December 20. The cause of the fire is not known.

Hagersville, Ont.—Fire recently destroyed the plant of the Canada Seed Company. Approximately 4,000 bags of seed were burned.

Hepler, Kan.—Fire, the cause of which is unknown, did serious damage to the elevator of the Mead Grain Company on December 27.

Okemah, Okla.—Fire destroyed the elevator of the Okemah Grain Company. Loss amounted to \$25,000. F. W. Silby is manager of the firm.

Pomona, Calif.—On December 13 fire destroyed the store and stock of the Hinman Feed Store. There were evidences of incendiarism in the fire.

Bondurant, Iowa.—A small fire occurred in the elevator of Clark Brown, Jr., on December 11. It is believed that tramps were responsible for the blaze.

Sands, near Sterling, Ill.—Fire on December 8 destroyed the elevator of Armour & Co., together with 10,000 bushels of oats and two cars of corn on track.

Minneapolis, Kan.—A small damage was done to the Farmers Elevator & Alfalfa Mill Company on December 5, when its elevator took fire from some unknown cause.

Bonner's Ferry, Idaho.—The warehouse of the Stoll Grain Produce Company took fire on November 26 from some unknown cause. The damage done was small.

Benton, Kan.—On December 10, fire destroyed the elevator here, owned by the Larabee Flour Mills Corporation. The loss included stock valued at about \$3,765.

Minneapolis, Minn.—Fire broke out in the flour chute in the Pioneer Elevator here and caused a loss of \$3,000. No serious damage was done to the elevator proper.

Waynesboro, Ga.—Fire on January 3 destroyed the plant of the Burke County Grain Elevator & Marketing Company with loss of \$15,000. The loss was covered by insurance.

Peabody, Mass.—On December 4 fire destroyed the grain and hay store of A. P. Ames. A considerable quantity of hay and grain was also burned. Loss amounted to \$10,000.

Marlette, Mich.—The Farmers Co-operative Elevator, with 6,500 bushels of beans, was destroyed by fire of unknown origin. The loss is covered by insurance. The elevator will be rebuilt.

Adair, Ill.—Fire on December 18 destroyed the elevator of DeForrest Bros. & Co., with a loss of \$17,000. The building was valued at \$12,000; contents at \$5,000. Practically all was covered by insurance.

Orcadia, Sask.—Fire on December 26 destroyed the elevator of the Northern Elevator Company. The elevator had a capacity of 35,000 bushels and contained a considerable amount of grain and flour when destroyed.

Covington, Ky.—The grain warehouse of the Cincinnati Grain Products Company was destroyed during the month of December. The loss amounted

to \$20,000; part of this was covered by insurance. In addition to the grain in the warehouse, five carloads of grain were destroyed. The warehouse until recently was owned by the Ruef Bros. Company.

Hawley (Hayfield P. O.), Iowa.—The Hubbard Grain Company's elevator here burned on December 15 with a loss of \$15,000. The loss is partly covered by insurance. The elevator was not in operation at the time.

Texarkana, Texas.—Fire recently destroyed the elevator of the Fouke Grain Company, with a loss of \$80,000. Of this, \$50,000 is covered by insurance. A considerable stock of grain, hay and groceries was destroyed.

Minneapolis, Kan.—The elevator of the Farmers Elevator Company at this place was damaged slightly by a fire on December 6. The blaze was started when the exhaust pipe and pot became overheated and set fire to the frame wall of the engine room.

Woodstown, N. J.—Fire on December 26 destroyed completely the new building of the South Jersey Farmers Exchange, of which A. B. Lippincott is manager. The building, with contents of fertilizer, seed and grain, was consumed. The loss was \$50,000; covered by insurance.

Evansville, Minn.—The office of the Anderson Grain Company was damaged by fire on December 26. Fire evidently started from an overheated stove set within 22 inches of the side walls. This is not enough clearance for a stove unless the walls are protected by metal over asbestos board.

Riverdale, Neb.—On December 20, the elevator of the E. D. Gould Cattle Company was destroyed. The fire started in a tool house adjoining the elevator. About 1,000 bushels of grain were burned. Loss amounted to \$7,000; no insurance was carried. The elevator was built 20 years ago by the Omaha Elevator Company.

Delia, Kan.—The grain elevator here was destroyed on Christmas day, together with 3,500 bushels of wheat, 6,000 bushels of corn and 2,500 bushels of oats. The elevator had a capacity of 20,000 bushels. The fire started in the engine room, evidently from a gas engine. H. R. Miller is manager and owner of the mill.

Cincinnati, Ohio.—The grain warehouse of the Cincinnati Grain Products Company and the planing mill of Frank G. Hehman in the same building were destroyed by fire on December 15. The day before the fire broke out, five carloads of grain had been stored in the warehouse by the Grain Products Company. The loss amounted to \$20,000. The building belonged to Charles and William J. Dorege, and was valued at between \$12,000 and \$15,000.

A LESSON LEARNED

A warning against the promiscuous use of explosive fumigants is contained in a letter to the Mutual Fire Prevention Bureau by the Farmers Union Co-operative Elevator & Shipping Association of Kirwin, Kan. The letter is as follows:

In regard to the explosion in our elevator will say that we were cleaning some weevil out of some wheat and that the cleaner was so fixed that the weevil were discharged into a bin in the engine room. I suppose we had about eight bushels of cracked wheat, and weevil were in same, so after we had let our engine cool off about three quarters of an hour we sprinkled about a quart of carbon-bisulphide on this wheat and the heat of the muffler of engine ignited same causing a dull explosion. At the time I had about a pint of the liquid in my hands in a sprinkler. When the explosion took place I ran out with the remaining liquid and set it down in a safe place and called the helper. Together with a high school boy we were able, with less than a barrel of salt water, to put out the flames. There was no damage

done whatever except the wetting of the cracked wheat and a bad spell of choking and coughing by those concerned in fighting the fire, as it was impossible to breathe in the room when it was burning. No damage was done to the building as it seems that all that caught fire was the acid

and we wet the wheat down until it was just out before any damage was done. In conclusion will say "Never Again" as we have learned our lesson and very little expense and it is one that will be lasting. I hope that other managers may benefit by our experience.

OBITUARY

ABRAMS.—Thomas W. Abrams died at his home in Decatur, Ill., on December 5. He was a veteran grain dealer and was formerly located at Tuscola and Bethany, Ill. His widow and four children survive.

ANDERSON.—Alfred Anderson died at his home in Buffalo, N. Y., aged 55 years. He was formerly chief inspector of the Buffalo Corn Exchange and had been with the Exchange for 15 years. He resigned some time ago because of ill health. His widow and two sons survive him.

ANDERSON.—O. D. Anderson died at Plankinton, S. D., recently. He was one of the most prominent of the pioneer elevator men in that part of the state.

BLAKE.—E. Nelson Blake died on December 17 at Arlington, Mass. He was president of the Chicago Board of Trade in 1884-1885.

BRUGGERHOFF.—Everett E. Bruggerhoff died suddenly on December 6. He was head of the seed firm of J. M. Thornburn & Co., of New York City until its failure a short while ago. He was 60 years old at the time of his death.

GRIMES.—Frank Grimes died at Brooks, near Hilger, Mont. He was formerly manager of the elevator there.

DAVIS.—J. W. Davis died at Chillicothe, Texas, from heart trouble at the age of 55 years. He was a well known grain dealer and cotton buyer. His widow and 13 children survive him.

EATON.—After a long illness, P. W. Eaton died at Williamstown, Mass. He conducted a wholesale grain business in which he was actively engaged until just a short time ago. He was 70 years old.

ELKINS.—Seldom if ever has such a universal feeling of sorrow and depression been expressed on the New York Produce Exchange as became evident following the announcement of the sudden death of Edwin W. Elkins at the age of 49 years. The feeling of profound regret was noticeable not only among members of the grain and flour trade, but among men in virtually all lines of business on the floor, attesting strongly to his great personal popularity as well as the high respect he commanded because of his upright business principles. For over 30 years, or since its organization, Mr. Elkins was one of the active representatives on 'Change of the Hecker-Jones-Jewell Milling Company, for which large corporation he was the chief grain buyer. For several terms he had served the Exchange faithfully and well as a member of its Grain Committee and all who had the pleasure of knowing him were convinced that the loss was a severe one not only to his close friends, but also to the Exchange as a whole. His untimely passing away was attributed primarily to serious intestinal troubles which necessitated an operation.

ELWOOD.—Capt. Robert D. Elwood died on December 27 at his home in Verona, Pa., aged 85 years. He was one of the organizers of the Pittsburgh Grain Exchange, and served as its first president. Two sons survive him.

FISH.—F. K. Fish died, aged 71 years, at New York, N. Y. He was an old member of the grain and feed trade there and had been active in the New York Produce Exchange for over 40 years.

FISHER.—On December 5, aged 61 years, Burt F. Fisher died. He was for 12 years manager of the wholesale feed and coal business of W. T. Jackson at Rochester, N. Y.

JAMISON.—H. Jamison died at Perryton, Texas, from typhoid fever at the age of 43 years. He was for several years a grain dealer at Glazier, Texas, and Perryton. At the time of his death he was in charge of a grain elevator at Perryton.

HASTINGS.—Reginald W. Hastings died at his home in Portland, Ore. He was a prominent grain man of that city and was in charge of the Portland office of H. W. Collins, a grain dealer of Pendleton. He was at one time grain buyer for Bal-four-Guthrie & Co.

HEWLING.—James Hewling was killed by a train while crossing the tracks at Kings Creek. He was owner of the Kennard Mill & Elevator Company, Kennard (r. f. d. Cable), Ohio.

HOWARD.—B. Frank Howard died on December 15, at Chicago. He was a statistician and senior member of the Howard-Bartels Company, publishers of the *Daily Trade Bulletin*. For 55 years he

had been a member of the Chicago Board of Trade, and was acknowledged to be one of the best-known grain statisticians in the country. He was 80 years old.

LOCKWOOD.—Benj. A. Lockwood died on December 4 at Des Moines, Iowa. Mr. Lockwood was engaged in the country elevator business. He was active in grain association work and was one of the organizers of the Grain Dealers National Association. In 1898 he was a director of the association and for two terms—1900-1902—was its president.

MAGUIRE.—Charles S. Maguire died at Norwood, Ohio, on December 12. He was a pioneer grain merchant and was the oldest active member of the Cincinnati grain trade. He entered the grain business in Cincinnati in 1864. He was a director of the Chamber of Commerce and of the Grain and Hay Exchange. His widow, son and three daughters survive him.

M'CULLOUGH.—H. B. McCullough died on January 3 from paralysis. He was a member of J. M. McCullough Sons Company of Cincinnati, Ohio.

MERRICK.—Charles Merrick died suddenly from apoplexy. He was president of the Farmers Co-operative Society of Dougherty, Iowa.

MOUDY.—After a long illness, Henry Moudy died at Adrian, Mo. He had been in the grain business at Adrian since 1880.

PHILLIPS.—James Phillips died December 27, after a brief illness. He was for five years general superintendent of the Murphy Feed Company of Milwaukee; for years he traveled as inspector for the Western Weighing and Inspection Bureau.

SPEAR.—After a short illness, Frank R. Spear died at his home in Chicago, Ill. He had for years been in the grain business there. His widow survives him.

STEPHENSON.—A. O. Stephenson died recently at Burlington, Iowa. He was formerly manager of the Iowa Grain Company, located at Cedar Rapids, Iowa.

TAYLOR.—Albert G. Taylor committed suicide by hanging himself. Mr. Taylor for the last 15 years conducted a flour and feed business at Glenville, Pa.

TYGERT.—On December 18, John F. Tygert died from paralysis at his home in Rutherford, N. J. He was an old pioneer hay shipper but retired from active business some time ago.

WHITE.—John J. White died suddenly at his home in Dorchester, Mass. Mr. White had been in the grain and hay business at Boston for many years and was a member of the Boston Chamber of Commerce. He is survived by his widow, three sons and three daughters.

YOUNG.—Robert Milton Young died at Morganfield, Ky., on December 26, aged 54 years. He was a well-known grain dealer of that city. His widow and two children survive him.

RECEIPTS AND SHIPMENTS

Following are the receipts and shipments of grain, etc., at the leading terminal markets in the United States for the month of December and the year 1921:

BALTIMORE.—Reported by Jas. B. Hessong, secretary of the Chamber of Commerce:

	1921	1920	1921	1920
Wheat, bus.	1,772,083	3,592,724	2,022,148	2,924,514
Corn, bus.	3,546,438	2,674,498	2,316,060	407,141
Oats, bus.	52,261	308,372	49,893	50,000
Barley, bus.	9,985	749,063	.....	.....
Rye, bus.	1,330,389	1,101,916	969,763	844,260
Millfeed, tons...	1,503	1,451	.....	.....
Straw, tons	56	192	.....	.....
Buckwheat, bus..	1,421	.....	.....	.....
Malt, bus.	13,525	2,248	.....	.....
Hay, tons	1,015	2,654	.....	.....
Flour, bbls.	95,885	112,505	12,031	11,303

BALTIMORE.—Reported by Jas. B. Hessong, secretary of the Chamber of Commerce (year):

	1921	1920	1921	1920
Wheat, bus.	23,229,056	33,544,501	21,935,950	29,780,569
Corn, bus.	22,168,762	5,310,433	19,951,319	1,909,658
Oats, bus.	1,655,278	3,816,077	629,331	2,030,836
Barley, bus.	1,256,463	1,251,328	1,454,257	855,959
Rye, bus.	13,407,239	20,933,270	11,755,119	19,835,770
Malt, bus.	42,136	363,560	.....	.....
Buckwheat, lbs..	3,925	2,604	.....	.....
Millfeed, tons ...	17,149	16,363	.....	.....
Straw, tons	1,276	1,889	.....	.....
Hay, tons	14,512	26,484	.....	.....
Flour, bbls.	1,565,919	2,089,765	667,038	1,871,210

BUFFALO.—Reported by Fred E. Pond, secretary of the Chamber of Commerce (year):

	1921	1920	1921	1920
Wheat, bus.	134,610,352	74,395,512	7,414,700	1,937,533
Corn, bus.	40,050,375	2,826,776	1,752,571	.....
Oats, bus.	23,478,121	5,151,499	2,216,687	74,000
Barley, bus.	7,660,229	4,468,705	1,214,430	366,681
Rye, bus.	8,254,556	16,676,107	92,899	1,732,500
Flax Seed, bus..	6,301,283	1,626,887	.....	.....
Flour, bbls.	6,613,369	4,510,408	12,285	153,174

CHICAGO.—Reported by John R. Mauff, secretary of the Board of Trade:

	1921	1920	1921	1920
Wheat, bus.	824,000	2,478,000	724,000	1,306,000
Corn, bus.	18,288,000	6,223,000	6,311,000	3,379,000
Oats, bus.	4,474,000	4,559,000	4,448,000	3,903,000
Barley, bus.	583,000	1,221,000	242,000	598,000
Rye, bus.	128,000	655,000	538,000	317,000
Timothy Seed, lbs.	2,317,000	2,951,000	2,392,000	2,013,000
Clover Seed, lbs..	1,833,000	1,004,000	1,017,000	464,000
Other Grass Seed, lbs.	2,485,000	1,461,000	1,445,000	733,000
Flax Seed, bus..	116,000	12,000	.....	.....
Hay, tons	14,576	20,567	577	1,791
Flour, bbls.	860,000	772,000	638,000	479,000

CHICAGO.—Reported by John R. Mauff, secretary of the Board of Trade (year):

	1921	1920	1921	1920
Wheat, bus.	45,700,000	28,997,000	41,073,000	36,064,000
Corn, bus.	182,982,000	85,487,000	117,313,000	37,778,000
Oats, bus.	82,729,000	74,939,000	58,927,000	46,421,000
Barley, bus.	7,763,000	11,289,000	4,297,000	4,592,000
Rye, bus.	4,215,000	6,325,000	3,857,000	7,439,000
Timothy Seed, lbs.	41,663,000	35,014,000	39,078,000	26,871,000
Clover Seed, lbs..	16,963,000	11,957,000	14,245,000	6,503,000
Other Grass Seed, lbs.	20,654,000	26,205,000	19,691,000	13,324,000
Flax Seed, bus..	969,000	1,160,000	36,000	144,000
Hay, tons	142,032	187,294	12,110	30,592
Flour, bbls.	10,910,000	8,354,000	7,722,000	6,092,000

CINCINNATI.—Reported by B. J. Drummond, executive secretary of the Cincinnati Grain & Hay Exchange:

	1921	1920	1921	1920
Wheat, bus.	187,200	169,200	116,400	115,200
Shelled Corn, bus.	564,000	432,400	345,600	288,000
Oats, bus.	212,000	224,000	178,000	250,000
Barley, bus.	5,200	1,300	.....	.....
Rye, bus.	1,200	10,800	6,000	12,000
Ear Corn, bus..	23,200	32,800	.....	.....
Feed, tons	1,710	1,680	.....	.....
Hay, tons	8,239	9,372	.....	.....

CINCINNATI.—Reported by B. J. Drummond, executive secretary of the Cincinnati Grain & Hay Exchange (year):

	1921	1920	1921	1920
Wheat, bus.	3,687,100	3,395,400	2,509,200	2,642,800
Corn, bus.	4,835,600	4,696,800	2,820,600	2,793,600
Oats, bus.	5,076,000	5,130,000	3,454,000	2,372,000
Barley, bus.	28,600	96,200	.....	.....
Rye, tons	259,200	249,600	183,600	134,400
Feeds, tons ....	.....	22,380	.....	.....
Ear Corn, lbs....	.....	586,400	.....	.....
Hay, tons ....	.....	110,263	.....	.....

DULUTH.—Reported by Chas. F. MacDonald, secretary of the Board of Trade:

	1921	1920	1921	1920
Wheat, bus.	2,619,377	4,268,682	3,242,328	4,815,476
Bonded Wheat, bus.	61,253	79,307	155,278	20,200
Corn, bus.	1,544,330	.....	54,072	.....
Oats, bus.	362,816	252,068	148,661	9,376
Barley, bus.	58,173	58,396	160,199	129,729
Bond. Barley, bus.	2,156	.....	.....	12,600
Rye, bus.	778,916	1,155,295	713,538	1,290,393
Flax Seed, bus..	365,777	611,138	741,201	347,250
Flour, bbls.	112,260	.....	510,680	.....

DULUTH.—Reported by Chas. F. MacDonald, secretary of the Board of Trade (year):

	1921	1920	1921	1920
Wheat, bus.	55,022,858	42,620,276	51,068,396	41,055,480
Corn, bus.	6,771,498	13,203	5,156,436	.....
Oats, bus.	6,425,037	3,163,361	3,548,288	882,442
Barley, bus.	5,078,115	3,425,431	4,973,450	3,345,550
Rye, bus.	13,400,013	19,959,589	13,138,700	23,511,674
Flax Seed, bus..	4,493,868	5,183,791	5,410,097	3,333,255
Flour, bbls.	6,933,230	4,846,392	7,685,975	5,701,167
Flour Produced, bbls.	784,035	827,990	.....	.....

FORT WILLIAM, ONT.—Reported by E. A. Ursell, statistician of the Board of Grain Commissioners:

	1921	1920	1921	1920
Wheat, bus.	23,017,722	27,924,643	18,030,714	23,812,004
Corn, bus.	1,170	1,447	57,032	1,449
Oats, bus.	6,238,702	4,849,919	3,739,239	3,051,982
Barley, bus.	1,227,406	1,746,163	959,873	1,214,293
Rye, bus.	447,447	459,478	277,092	455,920
Flax Seed, bus..	281,173	735,238	178,250	365,649
Mixed Grain, lbs.	2,255,950	3,082,702	851,590	466,080

FORT WILLIAM, ONT.—Reported by E. A. Ursell, statistician of the Board of Grain Commissioners (year):

	1921	1920	1921	1920
Wheat, bus.	173,364,496	86,891,205	169,047,841	96,806,649
Corn, bus.	793,723	321,640	738,168	321,662
Oats, bus.	51,005,550	23,468,468	50,920,080	23,037,473
Barley, bus.	12,959,772	11,552,780	13,057,751	13,604,514
Rye, bus.	3,518,180	1,103,809	3,344,267	1,145,166
Flax Seed, bus..	4,107,168	1,696,241	4,482,577	1,951,368
Mixed Grain, lbs.	26,508,803	26,498,407	9,248,146	23,005,475

GALVESTON.—Reported by H. A. Wickstrom, chief inspector of the Cotton Exchange and Board of Trade:

	1921	1920	1921	1920
Wheat, bus.	1,137,000	5,494,391
Corn, bus.	14,641
Oats, bus.
Barley, bus.
Rye, bus.	85,814	171,428

INDIANAPOLIS.—Reported by Wm. H. Howard, secretary of the Board of Trade:

	1921	1920	1921	1920
Wheat, bus.	166,000	114,400	49,000	42,900
Corn, bus.	2,724,000	2,511,600	1,676,000	1,957,200
Oats, bus.	754,000	810,000	402,000	766,000
Rye, bus.	13,000	5,600	6,000	9,800

INDIANAPOLIS.—Reported by Wm. H. Howard, secretary of the Board of Trade (year):

	Receipts		Shipments	
	1921	1920	1921	1920
Wheat, bus.	4,223,300	4,389,100	2,675,000	3,332,200
Corn, bus.	18,961,200	20,687,400	12,621,200	15,450,800
Oats, bus.	14,928,000	17,174,000	13,014,000	16,302,000
Rye, bus.	512,800	403,200	477,400	394,400
Flour, Mfg., bbls.	363,005	408,041	.....	.....

KANSAS CITY—Reported by E. D. Bigelow, secretary of the Board of Trade:

	Receipts		Shipments	
	1921	1920	1921	1920
Wheat, bus.	6,543,450	6,667,650	3,315,600	6,033,150
Corn, bus.	1,976,250	931,250	1,286,250	383,750
Oats, bus.	328,100	275,400	481,500	268,500
Barley, bus.	78,000	175,500	59,800	156,000
Rye, bus.	33,000	82,500	31,900	135,300
Bran, tons	1,440	3,240	13,300	8,400
Kaffir Corn, bus.	349,800	654,500	193,000	238,000
Hay, tons	17,856	27,156	3,780	14,856
Flour, bbls.	68,250	39,000	380,575	208,650

KANSAS CITY—Reported by E. D. Bigelow, secretary of the Board of Trade (year):

	Receipts		Shipments	
	1921	1920	1921	1920
Wheat, bus.	110,204,550	70,738,650	76,234,800	51,979,050
Corn, bus.	15,495,000	10,813,750	10,918,750	4,969,750
Oats, bus.	7,117,900	7,553,100	4,260,000	4,357,500
Barley, bus.	1,657,500	2,461,500	1,041,300	1,378,000
Rye, bus.	4,422,000	893,200	352,000	771,100
Bran, tons	40,300	49,400	173,230	129,400
Kaffir Corn, bus.	4,712,400	6,066,500	3,219,000	2,724,000
Hay, tons	235,824	559,800	87,588	259,848
Flour, bbls.	869,375	674,700	4,393,000	2,930,200

LOS ANGELES—Reported by M. D. Thiebaud, secretary of the Grain Exchange:

	Receipts		Shipments	
	1921	1920	1921	1920
Wheat, carloads..	214	177	.....	.....
Corn, carloads..	145	105	.....	.....
Oats, carloads..	29	28	.....	.....
Barley, carloads..	105	95	.....	.....
Rye, carloads..	1	1	.....	.....
Seed, carloads..	15	3	.....	.....
Kaffir Corn, carloads	12	48	.....	.....
Milo Maize, carl's	98	257	.....	.....
Flour, carloads..	106	148	.....	.....

LOS ANGELES—Reported by M. D. Thiebaud, secretary of the Grain Exchange (year):

	Receipts		Shipments	
	1921	1920	1921	1920
Wheat, carloads..	1,146	.....	.....	.....
Corn, carloads..	364	.....	.....	.....
Oats, carloads..	163	.....	.....	.....
Barley, carloads..	725	.....	.....	.....
Rye, carloads..	10	.....	.....	.....
Seeds, carloads..	10	.....	.....	.....
Milo Maize, carloads	999	.....	.....	.....
Flour, carloads..	654	.....	.....	.....

MILWAUKEE—Reported by H. A. Plumb, secretary of the Chamber of Commerce:

	Receipts		Shipments	
	1921	1920	1921	1920
Wheat, bus.	106,650	396,881	87,950	111,295
Corn, bus.	3,749,045	2,043,450	1,498,583	627,495
Oats, bus.	1,336,580	1,042,320	870,570	1,234,850
Barley, bus.	585,555	1,096,925	192,205	167,710
Rye, bus.	102,860	391,760	64,680	350,620
Timothy Seed, lbs.	377,560	167,630	170,105	72,190
Clover Seed, lbs.	656,811	76,375	1,207,004	131,284
Malt, bus.	20,900	83,600	279,481	532,108
Flax Seed, bus.	41,720	29,645	26,516	.....
Feed, tons	1,770	1,950	19,563	25,577
Hay, tons	1,250	1,833	360	168
Flour, bbls.	141,440	95,900	105,250	168,860

MILWAUKEE—Reported by H. A. Plumb, secretary of the Chamber of Commerce (year):

	Receipts		Shipments	
	1921	1920	1921	1920
Wheat, bus.	8,893,255	3,470,461	8,153,030	3,736,369
Corn, bus.	29,900,355	15,937,110	25,312,079	7,434,094
Oats, bus.	19,456,070	23,265,505	13,347,276	15,964,042
Barley, bus.	9,711,045	9,015,730	2,690,109	2,612,403
Rye, bus.	2,560,455	4,581,885	2,099,061	4,007,155
Flax Seed, bus.	773,426	691,750	26,516	11,487
Hay, tons	16,454	21,129	4,486	5,417
Flour, bbls.	1,693,930	1,144,106	1,338,525	1,076,010

MINNEAPOLIS—Reported by G. W. Maschke, statistician of the Chamber of Commerce:

	Receipts		Shipments	
	1921	1920	1921	1920
Wheat, bus.	8,577,270	10,540,580	2,348,860	4,656,650
Corn, bus.	1,865,340	1,956,960	1,175,690	1,161,360
Oats, bus.	2,356,720	1,883,100	2,060,910	1,318,170
Barley, bus.	674,940	2,002,800	692,190	1,726,880
Rye, bus.	390,060	636,680	200,920	603,230
Flax Seed, bus.	348,440	713,150	82,450	16,010
Millstuffs, tons..	6,324	7,775	46,341	55,558
Hay, tons	2,294	2,707	226	256
Flour, bbls.	93,318	87,082	1,053,973	1,396,949

MINNEAPOLIS—Reported by G. W. Maschke, statistician of the Chamber of Commerce (year):

	Receipts		Shipments	
	1921	1920	1921	1920
Wheat, bus.	122,165,350	112,366,000	50,492,970	46,288,940
Corn, bus.	12,000,390	8,981,340	8,554,410	6,525,630
Oats, bus.	30,860,500	22,208,160	16,693,380	18,190,120
Barley, bus.	13,307,290	16,020,160	12,657,940	15,184,860
Rye, bus.	5,356,910	7,164,570	3,189,230	12,429,280
Flax Seed, bus.	6,627,560	6,622,790	1,362,150	624,710
Millstuffs, tons..	52,845	93,765	642,383	672,247
Hay, tons	22,820	23,163	1,864	6,025
Flour, bbls.	1,183,558	906,326	16,645,196	16,882,574

MONTREAL—Reported by George Hadrill, secretary of the Board of Trade:

	Receipts		Shipments	
	1921	1920	1921	1920
Wheat, bus.	997,781	791,643	.....	.....
Corn, bus.	4,950	17,884	.....	.....
Oats, bus.	96,017	246,769	.....	.....
Barley, bus.	80,701	55,507	.....	.....
Flax Seed, bus.	10,006	33,000	.....	.....
Hay, bales	46,432	50,192	.....	.....
Flour, sacks	74,023	94,169	.....	.....

MONTREAL—Reported by George Hadrill, secretary of the Board of Trade (year):

	Receipts		Shipments	
	1921	1920	1921	1920
Wheat, bus.	61,040,506	45,554,675	50,083,125	42,881,442
Corn, bus.	45,852,396	348,098	43,516,521	489,753
Oats, bus.	23,487,245	7,219,733	19,539,870	2,958,690
Barley, bus.	7,500,728	3,649,001	7,239,077	5,117,548
Rye, bus.	6,523,008	2,376,868	6,503,177	6,535,933
Flax Seed, bus.	574,579	445,867	2,010	632
Hay, bales	411,609	437,994	57,278	68,108
Flour, sacks	3,246,725	2,456,474	3,368,151	2,443,065

NEW YORK CITY—Reported by H. Heinzer, statistician of the Produce Exchange:

	Receipts		Shipments	
	1921	1920	1921	1920
Wheat, bus.	9,348,600	.....	6,365,000	.....
Corn, bus.	2,665,000	.....	1,829,000	.....
Oats, bus.	1,051,000	.....	495,000	.....
Barley, bus.	210,600	.....	75,000	.....
Rye, bus.	338,800	.....	289,000	.....
Timothy Seed, bags .....	.....	.....	300	.....
Clover Seed, bags	1,287	.....	1,496	.....
Flax Seed, bus.	248,632	.....	.....	.....
Hay, bales	7,623	.....	2,272	.....
Flour, bbls.	913,916	.....	391,000	.....

NEW ORLEANS—Reported by Geo. S. Colby, chief grain inspector and weighmaster of the Board of Trade, Ltd.:

	Receipts		Shipments	
	1921	1920	1921	1920
Wheat, bus.	1,352,459	4,684,529
Corn, bus.	3,798,448	107,801
Oats, bus.	40,825	21,495
Barley, bus.	211,139
Rye, bus.	100,242	42,857

NEW ORLEANS—Reported by Geo. S. Colby, chief grain inspector and weighmaster of the Board of Trade, Ltd. (year):

	Receipts		Shipments	
	1921	1920	1921	1920
Wheat, bus.	55,903,904	49,589,787
Corn, bus.	13,757,818	1,244,282
Oats, bus.	598,315	906,960
Barley, bus.	831,439	6,203,382
Rye, bus.	1,079,227	237,857

OMAHA—Reported by F. P. Manchester, secretary of the Omaha Grain Exchange:

	Receipts		Shipments	
	1921	1920	1921	1920
Wheat, bus.	1,150,800	1,773,600	1,209,600	1,846,800
Corn, bus.	3,439,800	1,016,400	2,380,000	421,400
Oats, bus.	726,000	666,000	320,000	486,000
Barley, bus.	56,000	140,400	72,000	189,000
Rye, bus.	173,600	170,500	161,000	239,800

OMAHA—Reported by F. P. Manchester, secretary of the Omaha Grain Exchange (year):

	Receipts		Shipments	
	1921	1920	1921	1920
Wheat, bus.	30,504,600	24,786,000	28,594,200	23,503,600
Corn, bus.	22,912,400	20,277,000	20,017,200	16,570,800
Oats, bus.	9,134,000	13,982,000	7,052,000	11,770,000
Barley, bus.	1,215,800	1,162,800	1,005,800	966,600
Rye, bus.	1,581,800	1,969,000	1,272,800	1,932,700

PEORIA—Reported by John R. Lofgren, secretary of the Board of Trade:

	Receipts		Shipments	
	1921	1920	1921	1920
Wheat, bus.	63,825	179,700	64,800	109,200
Corn, bus.	2,736,140	1,513,600	1,723,000	1,107,800
Oats, bus.	1,045,800	733,500	903,400	687,300
Barley, bus.	42,400	128,800	33,600	67,200
Rye, bus.	9,825	146,400	18,000	148,600
Mill Feed, tons..	14,620	7,600	14,500	11,600
Seeds, lbs.	30,000	60,000	30,000	60,000
Hay, tons	690	1,220	300	680
Flour, bbls.	214,500	169,300	201,500	176,800

PEORIA—Reported by John R. Lofgren, secretary of the Board of Trade (year):

	Receipts		Shipments	
	1921	1920	1921	1920
Wheat, bus.	2,076,409	3,256,400	1,544,050	3,127,800
Corn, bus.	17,882,975	20,687,350	10,868,550	12,571,000
Oats, bus.	10,756,820	12,233,100	8,571,300	11,974,800
Barley, bus.	638,600	1,297,000	509,600	1,170,000
Rye, bus.	274,051	1,063,400	319,200	1,172,400
Mill Feed, tons..	96,360	110,920	151,610	176,855
Seeds, lbs.	1,740,000	3,870,000	1,400,000	2,490,000
Hay tons	7,870	30,630	4,100	8,590
Flour, bbls.	2,594,800	22,569,300	2,446,300	2,528,500

PHILADELPHIA—Reported by S. S. Daniels, statistician of the Commercial Exchange:

istician of the	Commercial Exchange:			
	Receipts		Shipments	
	1921	1920	1921	1920
Wheat, bus.	6,691,529	4,363,776	4,133,253	4,253,470
Corn, bus.	818,840	92,699	617,840	25,714
Oats, bus.	226,978	302,777	.....	30,000
Barley, bus.	16,673	.....	.....	.....
Rye, bus.	227,189	117,868	173,055	233,790
Flour, bbls.	306,583	230,617	25,230	8,350

FIELD SEEDS

E. H. Pershing is now sales manager for the Wing Seed Company of Mechanicsburg, Ohio. He was formerly of Logansport, Ind.

The capital stock of the Rogers Bros. Seed Company of Chaumont, N. Y., and Alpena, Mich., has been increased from \$375,000 to \$500,000.

Harry Sunfield has left the Marlow Seed Company of Wichita, Kan., and is now connected with the Nebraska Seed Company of Omaha, Neb.

The old business of the A. W. Schisler Seed Company at St. Louis, Mo., is being continued by the Lawrence Seed Company, with offices and warehouses there.

J. E. Bohrer, formerly of the American Seed Company of St. Louis, Mo., has organized at Fort Worth, Texas, as the Fort Worth Seed Company. He will operate a retail store.

William H. G. and Donald K. Belt and Clifton S. Brown have incorporated at Baltimore, Md., as the Belt Seed Company, Inc. Its capital stock is \$300,000. The firm will handle seeds of all kinds.

Capitalized at \$75,000, the Piedmont Seed Company has been incorporated at Greenville, S. C. J. A. Norris is president; J. B. Medlock, vice-president; and R. A. Deacon, secretary-treasurer of the firm.

The Edgar County Seed Association has been purchased by the Edgar County Seed Company of Paris, Ill. M. J. Money is the new owner. He was formerly junior partner with T. E. Money & Son of Newton and Yale, Ill.

New and more commodious quarters are now occupied by the D. R. Mayo Seed Company of Knoxville, Tenn. The store which it formerly occupied was established a few years after the Civil War and was regarded as a landmark around the city.

The interest of John W. Rodekhur in the Courtney Seed & Feed Company at Bemidji, Minn., has been purchased by William J. Courtney and H. F. Rubey. Mr. Courtney is president and Mr. Rubey secretary of the firm. Mr. Rodekhur was vice-president, but is retiring from the company and the business entirely.

The old Kimbrough-Mitchell Seed Company of Meridian, Miss., which in September of last year was thrown into bankruptcy, has been succeeded in business by the Kimbrough Seed Company. The business was purchased last year by the Standard Drug Company, who sold it to W. E. Kimbrough. Mr. Kimbrough was a stockholder in the old company, but had retired from active management. He now assumes management of the new firm and will conduct it, as stated above, under his own name.

A wholesale seed and feed house was put into operation at Baltimore, Md., on January 2 by Blamberg-Bixler Company, Inc. The active management of the business is in the hands of G. Hartman Blamberg, who for the past eight years has been president and general manager of Blamberg Bros., Inc., and Thornton A. Bixler, for the past three years in charge of grass and field seed department of the J. Bolgiano Seed Company. The firm will also manufacture mixed feeds.

The A. A. Berry Seed Company of Clarinda, Iowa, write that they have completed all the buildings which it started after the fire and now have a larger and better plant than before. The buildings include one combined elevator and cleaning plant, 28x50; one tile storage building, two stories and basement, 40x90; also about 100 feet of the three story brick building which burned off and in which the company's offices are now located were rebuilt. The company says "We are now in good shape to handle all business which may come our way and are glad to report that the outlook is far more promising than it was a year ago at this time."

NEW ENGLAND SEEDSMEN ELECT

The New England Seedsmen's League met on December 1 in Boston, Mass., and elected the following officers to serve during the ensuing year: President, W. S. Pino, Providence, R. I.; vice-president, Peter Dewar of Boston; secretary-treasurer, Peter M. Miller of Boston.

WESTERN SEED DEALERS MEET

On December 10, the Western Seed Dealers Association held its mid-winter meeting at Kansas City, Mo. The meeting was well attended by seed men of the Central and Western States. The principal speakers included President Fred Mangelsdorf, C. C. Massie, L. Peppard, J. W. Perry and Henry J. Waters. In the evening the visitors were the guests at dinner of the Kansas City seed dealers.

MEETING OF SOUTHERN SEEDSMEN

Announcement has been made that the 1922 convention of the Southern Seedsmen's Association will be held in New Orleans next May 29-31 inclusive. A committee, appointed by President Joseph Steckler and composed of Dick O'Bannon, Sherman, Texas, and L. E. Harris of Birmingham, Ala., is preparing the program for the meeting, which promises to be one of the most interesting in the history of the association. The officers are desirous of a large attendance.

SEED FOR CANADA MUST BE LABELED

All seed exported to Canada must be labeled under requirements of the law which became effective in the Dominion on December 31.

The container, whether it be an envelope, a box, bag or in some other form, must be stamped to show the country in which the seed originated.

Failure to comply with the regulations as to marking will subject the seed to an additional duty of 10 per cent ad valorem and it will be held in

the customs warehouse until properly labeled. This law applies to other goods as well as to seeds, and the name of the country of origin must be in English or French. "Made in U. S. A." will be accepted as sufficient to designate the United States of America as the country of origin. Seeds or other commodities ordered before October 1, 1921, may be imported without marking up to July 1, 1922.

MOVEMENT OF MILLET SEED SLOW

The movement of Millet seed from growers' hands in most sections was slow during the two weeks ending December 10. The larger jobbers were unable to interest seed dealers in early purchases and were reluctant to bid on samples submitted by country shippers and growers.

Little or no change took place in prices paid to growers during the two weeks. In the Tennessee district about \$2 per 100 pounds was offered for thresher-run Golden Millet seed. An average price of 80 cents was paid to growers in the Kansas and Missouri districts for that variety and about 10 cents per 100 pounds less for Common Millet. Although prices of Siberian Millet in some sections of Kansas were about 5 cents under those for Golden Millet, in sections in other states more or less nominal prices of 80 cents to \$1.20 were reported. Japanese Millet brought \$2.75 to \$3.50 in New York and Iowa, respectively. Broomcorn Millet prices varied considerably, ranging from 50

[Field Seeds Continued on Page 544]

HAY, STRAW AND FEED

REDUCTION IN COMMISSION CHARGE

On December 15, members of the Kansas City Hay Dealers Association agreed upon a general reduction of commissions for selling hay and straw. The new schedule took effect on January 1 as follows:

Hay—Under \$18 a ton, 75 cents commission, with a minimum of \$7.50 a car. Over \$18 a ton, \$1 commission, with a minimum of \$10 a car.

Straw—Under \$10 a ton, 50 cents commission, with a minimum of \$5 a car. Over \$10 a ton, 75 cents commission with a minimum of \$7.50 a car.

ALL HAY IN GOOD DEMAND

All offerings met a ready sale at firm prices, say Albert Miller & Co., of Chicago, under date of January 11. Best prices, however, being secured on north side but selling well on all roads. Colder weather with snow in sight, a fact that will help market all around. Prairie: Active demand now for all grades while arrivals very light. A good time to start some this way. Alfalfa: We have good demand for good, green leafy second and third cutting. Selling largely to outside dairy trade. Straw: If you have some we need it. Good prices assured.

HAY MARKET STRONG

The hay market has been very strong during the past week because of the extremely light receipts and an increased demand from the South.

At the present time receipts are beginning to pick up a little, but the demand is still improving and we look for a better market than we have had for the past six months.

The demand is very keen for top grade light mixed and Timothy. Low grades are selling at considerable discount, but are being disposed of much more easily than at any time during the present season.

We believe this is an excellent time to keep some shipments coming to the plug track in Cincinnati.

We again want to remind the trade to bill their hay via Pennsylvania Railroad at the nearest junction point.—The Mutual Commission Company, Cincinnati, Ohio. Letter of January 11.

HAY SITUATION AT KANSAS CITY

BY B. S. BROWN

Weakness generally has prevailed in the hay market at Kansas City the past few weeks, due to a dull year-end demand. The better grades of Alfalfa have shown the largest declines, losses ranging from \$2 to \$3 as a rule. The lower grades of Alfalfa were quoted steady to about \$1 lower. The bulk of the receipts consisted of this grade which explained in part the declines. Prairie also was inclined lower, the better class of offerings dropping 50 cents to \$1 and the lower grades remaining about steady. Timothy and other grades were about unchanged, with trade dull.

The turn of the new year, which has been marked by moderate reductions in freight rates in most parts of the country, is expected to result in an

improved trade. The declines are not large enough to make shipments from distant territory profitable, but the lower transportation charges are a step in the right direction. For nearly a year the high freight costs and the relatively low prices obtainable at terminals have made it impossible to move the surplus supplies of hay.

Receipts continued small last month, the total amounting to 1,488 cars, compared with 3,263 cars on December, last year, and an average of 2,834 for the past 10 years. In the year just ended arrivals were 19,418 cars, compared with the high record of 46,559 cars established last year and 37,973 cars two years ago.

SALES OF COWPEAS NORMAL

A normal movement of cowpeas from growers' hands in most of the more important producing sections is indicated in reports to the Bureau of Markets and Crop Estimates during the week ending December 17. In western North Carolina the movement is reported to be above normal, while in northern and southwestern Alabama, southeastern Georgia, and southern Illinois and Indiana only 5 per cent to 20 per cent of the crop had moved up to December 15.

Price changes from November 12 to December 15 were somewhat erratic, there being no consistent advance or decline in the various sections, as will be noted in the accompanying table. This may be accounted for by the fact that at most shipping points only local shippers are active buyers, that few seedsmen or wholesale dealers have entered the field to purchase their requirements, and that no definite price level has been established. Prices on the average are about the same as were being paid last year at this time.

NEW YORK HAY SLIGHTLY HIGHER—RECEIPTS LIMITED

BY C. K. TRAFTON

To say the least, it certainly seems entirely gratuitous to assert that the volume of business in hay during the past month was small. As a matter of fact, it is generally customary to look for dullness, and particularly in the latter part of December when practically every member of the trade and especially among buyers who are accustomed to buying as sparingly as possible while the annual stock taking is going on.

No doubt the quietude at this time was also partly traceable to the fact that virtually every one concerned was inclined to make few or no contracts of moment, largely because they believed it would pay them to remain as passive as possible pending the proposed reduction in rail freight rates. In view of the fact that the farmer and country shipper as well as the distributor and local dealer were equally concerned in the matter of freights, it was by no means surprising that the absence of activity failed to have a depressing influence as it might have done under ordinary circumstances.

Indeed, at times there was a stronger tendency which was attributable largely to the unwillingness of farmers or country shippers to make sales

for forward shipment excepting at slightly higher figures. At times it seemed evident that farmers or country shippers were aware that stocks here were down to a low plane, and consequently they considered it good policy to hold back either until bids were raised or freight rates lowered.

On the other hand jobbers and local dealers have appeared equally stubborn, being unwilling to buy except in a small or moderate way in order to keep up assortments. Temporarily receipts of good-to-choice Timothy or light Clover Mixed in large bales were so meager that buyers found it impossible to secure supplies excepting at a small advance but afterwards offerings became a trifle larger and almost all of the advance was lost. In some quarters it was claimed that more horses had been employed because many large concerns had been using more horses and particularly for short hauls. It was the consensus that this had been found advantageous partly because of the low cost of feed while the price of gasoline, etc., was comparatively high.

NEW FEED BRANDS

"GRISTO" stock and poultry feed, namely, hog fattener, cattle fattener, calf developer, pig developer, milk maker, work feed, egg maker, and chick developer. The Scott County Milling Company, Sikeston, Mo. Filed July 12, 1921. Serial No. 150,294. Published December 13, 1921.

"MIN-RO-FED" mineral feed for animals and poultry. Shores-Mueller Company, Cedar Rapids,



Iowa. Filed August 1, 1921. Serial No. 151,236. Published December 13, 1921.

"RELIABLE" poultry feed. Kingman & Co., Inc., Indianapolis, Ind. Filed July 27, 1921. Serial No. 151,012. Published and registered December 20, 1921.

Feed Trademarks Registered

149,432. Cornmeal, Graham flour, whole wheat flour and dairy, horse, hog, cattle and hen feeds. H. A. Liedel & Son, Springfield, Ill. Filed November 1, 1920. Serial No. 139,040. Published August 30, 1921. Registered December 13, 1921.

149,441. Prepared poultry feed. William J. McKay, Chicago. Filed April 18, 1921. Serial No. 146,324. Published July 19, 1921. Registered December 13, 1921.

149,473. Dairy feed. M. C. Peters Mill Company, Omaha, Neb. Filed April 13, 1921. Serial No. 146,138. Published July 19, 1921. Registered December 13, 1921.

149,516. Stock feed or sweet feed. Temtor Corn & Fruit Products Company, St. Louis, Mo., and South Fort Smith, Ark. Filed April 11, 1921. Serial No. 146,042. Published July 19, 1921. Registered December 13, 1921.

149,517. Stock feed. Temtor Corn & Fruit Products Company, St. Louis, Mo. Filed April 11, 1921. Serial No. 146,043. Published July 19, 1921. Registered December 13, 1921.

149,518. Dairy feed. Temtor Corn & Fruit Products Company, St. Louis, Mo., and South Fort Smith, Ark. Filed April 11, 1921. Serial No. 146,045. Published July 19, 1921. Registered December 13, 1921.

149,930. Poultry food. G. F. Givan, Constantine, Ky. Filed February 15, 1921. Serial No. 143,595. Published August 23, 1921. Registered December 27, 1921.

150,255. Food for hogs or swine. Blatchford Calf Meal Company, Waukegan, Ill. Filed September 11, 1920. Serial No. 137,063. Published September 13, 1921. Registered January 3, 1922.

150,284. Prepared poultry feed. Chapin & Co., Hammond, Ind., and Chicago, Ill. Filed May 2, 1921. Serial No. 147,092. Published September 6, 1921. Registered January 3, 1922.

149,637. Feed for horses, mules, cattle, hogs and poultry. Beaumont Cotton Oil Mill Company, Inc., Dallas, Texas. Filed July 21, 1917. Serial No. 105,163. Published August 30, 1921. Registered December 20, 1921.

149,691. Cracked corn for poultry feed, known as scratch feed. Chas. A. Krause Milling Company,

Greenfield, Wis. Filed May 3, 1920. Serial No. 131,974. Published August 23, 1921. Registered December 20, 1921.

149,519. A fattening feed for stock. Temtor Corn & Fruit Products Company, St. Louis, Mo., and South Fort Smith, Ark. Filed April 11, 1921. Serial No. 146,046. Published July 19, 1921. Registered December 13, 1921.

149,520. Horse and mule feed. Temtor Corn & Fruit Products Company, St. Louis, Mo., and South Fort Smith, Ark. Filed April 11, 1921. Serial No. 146,047. Published July 19, 1921. Registered December 13, 1921.

Feed Labels Registered

23,753.—Title: "Northrup, King & Co.'s Special Scratch Feed." (For Bags of Poultry Feed.) Northrup, King & Co., Minneapolis, Minn. Filed September 19, 1921. Registered December 13, 1921.

HAY CONDITIONS AT ST. LOUIS

BY S. F. LARRIMORE

There has been very little change in the St. Louis hay market during the past month. It is hoped that the demand may improve which will enable dealers to work off the immense surplus of hay in the country.

The general hay situation as yet is showing no improvements, but there are hopes that within the next few days or so, as soon as the trade gets back to business, that there will be an increased demand for hay. In the view of many dealers we cannot look for higher prices as hay is relatively high as compared to corn and other feeds.

The Timothy hay market is quiet but steady, receipts are very light, but demand is quiet also. There is a fair outlet for high-grade Timothy at steady prices, but the lower grades are in liberal supply and dull. Light Clover Mixed is firm with an excellent demand for good No. 1. The demand for medium grades is fair. Heavy Clover Mixed hay is quiet; offerings are also light and the demand is fairly good for the better grades. Good No. 1 Pure Clover is in demand, but the lower grades are dull.

Alfalfa hay continues to rule unchanged, and there is a demand for high-grade Soft Leafy Alfalfa suitable for the dairy trade. Everything else is dead dull. The trade is over-supplied with the medium grades, and there is very little outlet.

NEW STANDARDS FOR SORGHUMS

New standards for the grading of grain sorghum heads in the State of Texas were put into effect January 1 by the Commissioner of Markets and Warehouses of Texas.

By these, five numerical grades and sample grade are established, and provision is made for appropriate class designations to include Kaffir, Feterita, Milo, other grain sorghums, and mixed grain sorghums.

The requirements for the numerical grades of all classes are identical and are as follows:

No. 1 shall be heads that are dry, of good color, sound, sweet and heavy well matured grain. May contain not more than 2 per cent of discoloration or stain. Not more than 10 per cent of stems shall be over 5 inches in length from base of head.

No. 2 may be slightly stained and contain 5 per cent of other grain sorghums, but must be dry, sound, sweet and of heavy well matured grain. May contain 2 per cent of blight or immaturity. Not more than 10 per cent of stems may be over 5 inches in length from base of head.

No. 3 may be stained or discolored, and 10 per cent of other grain sorghums of which 3 per cent may be non-grain sorghums. Must be dry, sound, sweet, and of heavy well matured grain, but may contain 10 per cent of immaturity, blight or damage. Not more than 10 per cent of stems shall be over 5 inches in length from base of head.

No. 4 may contain 15 per cent of other grain sorghums of which 5 per cent may be non-grain sorghums and may be badly stained or weathered. May contain not over 10 per cent damage and not over 15 per cent immaturity or blight. May be musty but must be cool.

Sample grade may be heads that are heating, fire burned, infested with live weevil, or otherwise of distinctly low quality and not good enough to comply with the requirements of a numerical grade.

A large feed grinder is being installed at St. Maries, Idaho, for George O'Dwyer, Inc.

Sturman & Gamble are succeeded at Dahlgren, Ill., by the Gamble Feed & Seed Company.

A new feed plant is being erected at Hagerstown, Md., for the Federal Milling & Refining Company.

The flour and feed business at Harvard, Neb., of Harry Tickzler has been sold to Wm. Harris of Kenesaw.

The Rex Company of Iron Mountain, Mich., has added feed, scratch feed, corn and flour, to its line of products.

A retail and wholesale feed business is to be conducted at Henderson, Texas, by P. J. McNee and Glenn Porter.

A warehouse for storing feed and flour, is being erected at Leonardville, Riley County, Kan., for the Farmers Union.

A large building has been completed at Walnut Ridge, Ark., for Burrus & Son, which will be used as a feed warehouse.

The Ideal Feed Store at Eugene, Ore., has been

purchased by F. A. Baker. It was formerly the property of J. J. Light, who went out of business last September.

The new chicken feed plant of the Wright Milling Company of Bluefield, W. Va., will be completed by January 15.

J. R. Strader's feed business at Hamburg, Iowa, has been purchased by Charles Zanker. He will install a feed mill soon.

The capital stock of the Nashville Mill & Feed Company, operating at Nashville, Tenn., has been increased from \$100,000 to \$175,000.

The half interest of E. L. McCartney in the McCartney Feed Company at Bradford, Tenn., has been purchased from him by A. F. Moore.

A. W. Coulson & Son have taken over the feed and coal business at Utica (Stoughton p. o.), Wis., conducted formerly by A. D. Morgan.

Lawrence Levengood has purchased the feed and flour business of A. K. Kulp at Pottstown, Pa. Mr. Kulp retires because of ill health.

The feed mill of Carl Burns and Ralph Guthrie was sold by them to W. H. Callahan of Camp Point, Ill. Possession was given the new owner on January 10.

The Banko Grocery & Feed Company has been organized at Columbia, Tenn. The company will handle the Purina line of hog, cattle, horse, and poultry feeds.

The capital stock of the Security Mill & Feed Company of Knoxville, Tenn., has been increased from \$100,000 to \$175,000. W. S. Howell is general manager.

A galvanized flour and feed house has been erected at Hollis, Okla., by H. Hendrick & Scruggs. The warehouse will be operated in connection with their elevator.

A branch distributing plant has been opened by C. S. Schermerhorn & Son at Frederick, Md., poultry feed manufacturers. Its main office is at Baltimore, Md.

E. A. Moore, E. E. Thompson and O. P. Miller have incorporated at Memphis, Tenn., under the name of the E. A. Moore Feed Company. Its capital stock is \$10,000.

Additional equipment has been installed in the feed mill of the Riverside Milling Company of Everett, Wash., and the capacity of the plant has been increased considerably.

The Farmers Union Co-operative Exchange has purchased the Watson Grocery at Ada, Okla. The company will deal in feed, flour and farm products, with G. W. Golightly as manager.

The Reliable Feed Store has been established at Columbia, S. C., by W. R. Bishop and his son, F. S. Bishop. Feeds and hay are the primary lines carried. F. S. Bishop is manager.

Percy Stephens is no longer with the J. J. Badenoch Company of Chicago, Ill., as manager of its feed department. Chas. Rockwell succeeds him. He was formerly with the Park & Pollard Company.

Flour, feed and groceries are to be handled on a large scale by the Ridling Company which was recently incorporated at Mena, Ark., by Samuel and Neill Ridling. They operate a number of stores.

The name of the Morgan Feed & Fuel Company of Wichita Falls, Texas, has been changed to that of the Wichita Feed & Fuel Company. No change in the management of the firm has been announced.

A full line of feed mill machinery is to be installed in the plant at Durango, Colo., which the Farmers Supply Company recently bought from the C. H. Clark Seed Company. F. W. Kroeger is manager.

Articles of incorporation have been filed by the Sound Feed Company of Thomas, Wash., capitalized at \$25,000. The company will deal in hay, grain, produce, etc. R. L. Robbins and W. A. Hall are interested.

A feed business has been organized at Chino, Calif., by J. B. Fugate and Fred A. Tebo, to be known as the Fugate & Tebo Feed Store. Mr. Fugate was formerly manager of the Chino branch of the Citrus Belt Milling Company.

The Hoosier Feed & Feeder Company has been organized at New Castle, Ind., to handle a complete line of field and garden seeds, incubators, etc. The company occupies offices in the Maxim Building with J. E. Ryburn in charge.

Nathan, Benj. and William Stein and Benj. Gill have incorporated at Milwaukee, Wis., as Stein Bros., Inc., and will continue the business conducted there as Stein Bros. They are wholesale dealers and jobbers of feed, flour, cigars, tobacco and confectionery.

Olaf Anderson, T. B. Weir, and T. H. Kennedy have incorporated at Helena, Mont., as the Tri-State Auto Electric Air Feed Company. Its capital stock is \$50,000. The company will conduct a milling, and a general livestock, agricultural and ranching business.

Let the Bird Scale Protect Your Weights

The common objections to accepting your weights are eliminated by the mechanical design and weighing system of the BIRD Scale.

It is independent of out of level conditions, it is independent of clean or chaffy, dry or damp, light or heavy grain. Even corn on cobs can be weighed over it. It is independent of the man, of his mistakes, his carelessness or his mechanical inexperience. It is self operating, insofar as self operating scales have proven practical in giving accurate and indisputable weights.

The BIRD Scale requires less attention than any other scale, if operated according to Interstate Commerce Commission specifications.

Approved By Weight
Authorities

Not only elevator operators who have had experience with all scales acknowledge the BIRD Scale superior to them all as a shipping scale, but also

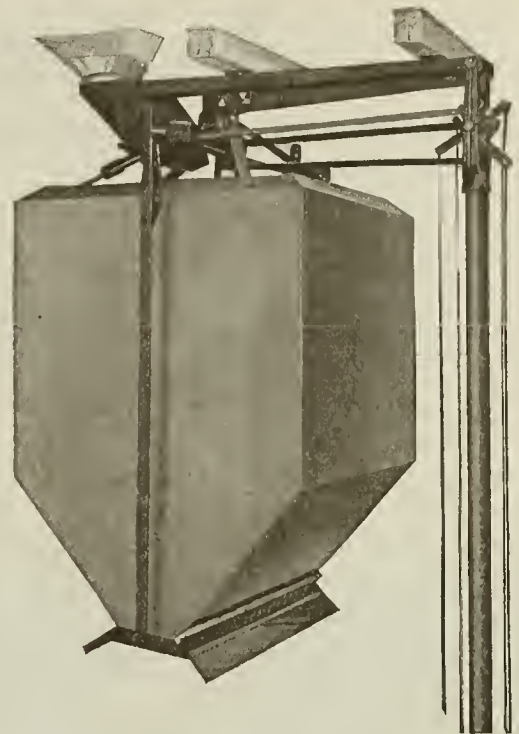
official scale inspectors, weighmasters and even claim agents pronounce the BIRD Scale a better and more positive weighing system than the ordinary automatic scales.

The reason is: The BIRD Scale, being suspended from the structure, is not affected by settlement of the elevator. Heat or cold cannot influence its weighing because of contraction or expansion of steelyard rod. Self-locking system makes it impossible to operate the scale wrong. Weighing is positive and guaranteed to be accurate. Hopper capacity of 3,000 pounds makes few drafts to a car.

The BIRD Scale is the only grain weighing device that automatically makes a complete reproduction in triplicate of the exact weight to the pound as shown by the beam at each draft.

Let us give you all the facts about this scale, let us show you the actual records of its performance and official tests, let us talk it over anyway.

Write for complete catalog.



The Strong-Scott Mfg. Co.

"Everything for Every Mill and Elevator"

Minneapolis, Minn.

Great Falls, Mont.

THE ETERNAL TRIANGLE OF THE GRAIN BUSINESS

The different interests represented by the shipper, the carrier and the receiver of a carload of grain are centered around the question of determining, satisfactorily to all concerned, the exact weight of the shipment.

The receiver is protected, usually, by weights, supervised at destination, by sworn weighmasters. The carrier is protected by his constitutional rights, which leaves the burden of proof upon the shipper, and which gives to the carrier the privilege of showing where the shipper's weights, either because of the principle of the scales or because of his system of weighing, may have been in error.

The shipper alone is not protected, except the protection that his weighing-out scales and his system of weighing, together with his own care, give him.

Under these conditions the situation is a serious menace to the shipper unless he is as careful and accurate in weighing the grain that he sells as he is when he buys it from the farmers and as careful in making his cars grain tight as he naturally would be in making his elevator grain tight. The carrier's confidence once established in the grain shipper's method of weighing and loading, will make less trouble in adjusting claims and cause both shipper and carrier less losses.

Grain dealers operate on a small margin. They must be able to sell and collect for all the grain they buy, natural shrinkage excepted, or they face a loss. Of course, a man's ability to "buy right" and to "sell right" counts for a great deal, as does also his ability to improve the grade of his product before selling. The foundation of his business, however, the only thing that sets a grain dealer right for a sure-fire profit, is that his weights hold out. The juggling with prices and grades may miss fire.

What precaution does the average grain dealer take to protect his weights and to make them hold out? He spends all day, if necessary, at his scale, supervising the weighing when he buys the grain, but when he ships he is content to have a scale weighing usually from three to six bushels at a draft, stand unsupervised in a dusty and dirty cupola to do the work for him. He even demands to be free of the supervision of the weighing out, satisfied it is not necessary and thinking that it is a waste of time and effort.

The natural inference, that anyone interested

would make, is obvious. A successful business man, be he in the grain business or in any other line is a keen psychologist. He conducts his business so that the people he deals with, both buying and selling, get confidence in his methods. A banker will extend credit as much upon past experience as upon actual financial worth. A railroad will determine the value of a grain shipper's claim for shortage as much upon the system and method of his weighing as upon the accuracy of his scales.

Now then, if it is known that railroad and weighing authorities, generally, object to certain weighing methods extensively used by country grain shippers, is it good business to persist in determining shipping weights in this disapproved manner? No matter what your own personal opinion and inclinations may be, is it not good business to follow the lines of least resistance in such an important part of your business as determining the amount of your sales?

Your scale may weigh ever so correctly. If your system of weighing gives an interested party a chance to puncture holes in your proof, you might as well have had no scales, as far as the merits and validity of your claims are concerned.

The triangle of the shipper, the carrier and the receiver represents all different interests that are bound to be asserted in case of losses in transit or serious discrepancies in weights at destination. Who will prevail?

To begin with, the burden of proof is on the shipper. If the carrier or the receiver can show by precedence and record that the shipper's weighing system is not infallible or uniformly reliable the shipper is at once facing a compromise or else a lawsuit. In either case it means a loss to him.

The grain shippers may think what they will about the fairness or unfairness of the carrier, in matters pertaining to claims for losses in transit. A claim agent is human the same as the rest of us and undoubtedly he can show that shippers too have tried to slip something over, consequently he will protect his interest with the means he has at hand and if the shipper gives him any loopholes through which he can successfully contest the weights he will do so. On the other hand, if the grain shipper adopts a weighing system that in the first place eliminates that known objection of the carrier he automatically places the burden of proof upon the carrier, making it necessary for him to prove the shipper's weights.

A scale and a weighing system that cuts out

the many small drafts, that is independent of conditions in the elevator and the grain, that is independent of the operator's mistakes, of his ability and of his judgment, a scale and system that leaves nothing to chance, that a man knows is right at every draft would seem to be the logical weighing equipment for country elevator's to use.

If any shipper of grain, therefore, has trouble with his weights he should investigate carefully before equipping his elevator with a shipping scale and be sure that he equips himself so that he can eliminate the known objections of the carrier to taking the shipper's weights as determined by the type of scales now in use.

A feed mill is to be erected at Derby, Kan., by J. Thurm.

A warehouse for storing feed and flour is to be erected at Leonardville, Kan., by the Farmers Union.

The Hess Feed Store at Hutchinson, Kan., has been purchased by Ben Myers. He is now ready for business.

The C. & A. Store Company has purchased the property of the Boulder Feed & Supply Company of Boulder, Colo.

The New England Stock Feed Company has been incorporated at Everett, Mass., capitalized at \$50,000. W. W. Butman is president and E. L. Sweetser, treasurer.

A wholesale and retail feed and flour business is to be conducted at Washburn, Wis., by J. S. Fletcher and Edgar Peterson. Mr. Fletcher resigned as manager recently of the Bayfield County Farmers & Fruit Growers' Association.

The feed mill of the Scott Bros. Grain & Fuel Company at Fort Worth, Texas, is being enlarged. The firm probably will increase the variety of feeds handled. The company has manufactured and sold poultry and dairy feed for 10 years.

W. R. Gilbert, M. L. Coley and others are interested in the recently organized Alabama Feed & Grocery Company of Talladega, Ala., capitalized at \$20,000. The company will carry on a wholesale grocery and commercial feed and grain business.

The plant of the Southland Milling Company at Fort Worth, Texas, has been purchased by M. O. Andrews, B. F. Duggan, R. J. Coke and E. C. Sleight. The name has been changed to that of the Universal Mills; stock and chicken feed is to be manufactured by the company.

COAL

COAL SURVEY

Secretary of Commerce Hoover has made plans for a survey of the entire bituminous coal situation, by a special staff of the President's Unemployment Conference. Funds for the survey have been contributed by the coal interests. It will cost from \$6,000 to \$7,000. The special phase of the coal situation that will be considered is the intermittency of the industry with reference to employment and production. Engineering societies will co-operate. The investigation is expected to take several months.

DESTINATION VALUE OF COAL

Coal shippers and railroads will find the case decided by Judge Newby of Woodbury County, Iowa, of much interest and importance. The Brown Coal Company of Sioux City brought action against the Illinois Central to establish liability for coal in transit. A car of coal received by the plaintiff weighed 5,200 pounds less when delivered than when billed from the mines. Settlement was required of the fuel company on the basis of mine weights.

The verdict grants the plaintiff full destination or replacement value for coal destroyed in transit. Loss of coal being shipped has been regarded more or less as a matter of course. There has been much pilfering from the cars, and for this the decision holds the transportation company responsible.

CANADA'S COAL OUTPUT

During the first six months of 1921, the output of coal from Canadian mines declined to 86 per cent of that produced in the first half of 1920, but was 5 per cent more than output in same length of time in 1919. According to the Dominion Bureau of Statistics, New Brunswick was the only province which equaled the output of 1920. The total output for Canada in the six months was 6,783,060 tons, with a total value of \$32,883,953, or an average per ton of \$5.75.

Nova Scotia produced 2,750,319 tons of bituminous coal, with an average value per ton of \$6.40. New Brunswick's output was 69,230 tons of bituminous, with an average value of \$5.74 per ton. Alberta turned out 46,402 tons of anthracite, average value \$8.53; 1,261,080 tons bituminous, average \$4.87, and 1,125,312 tons lignite, average \$4.50. British Columbia's output was 1,385,323 tons bituminous, average value \$6.79 per ton. Saskatchewan produced 145,394 tons of lignite, with an average value of \$2.43.

COST OF ANTHRACITE LABOR INCREASED

The labor cost of producing anthracite coal has increased from \$1.59 per ton in 1913 to \$3.85 per ton under the present wage scale, according to a bulletin issued by the General Policies Committee of Anthracite Operators, which says in part:

"In 1913 there were produced 71,046,816 tons of anthracite at a labor cost of \$113,320,000, or about \$1.59 a ton. The production in 1920 was 65,458,673 tons and the labor cost was \$252,179,000, or \$3.85 a ton—an increase of 141 per cent.

"These figures are based on commercial fresh-mined coal exclusively. The coal consumed at collieries and the washery or dredge product is not included.

"Labor now absorbs 70 per cent of the cost of producing anthracite. Until wages are lowered, a reduction in the mine price of anthracite is impossible.

"The present wage agreement, which is based on the award of the United States Anthracite Coal Commission, does not expire until March 31, 1922. Leading officials of the miners' union have indicated opposition to any decrease in wages at the expiration of the contract. Anthracite producers, however, feel that the question of a readjustment of mine wages will be determined by the opinion of the public, which has a vital interest in the matter.

"Should there be no such wage adjustment as has occurred in other basic industries, it would mean that the public must continue to pay the present prices for coal, which are admitted to be out of line."

GREAT LAKES COAL TRADE

Anthracite shipments by lake from the port of Buffalo last season were 3,810,315 tons, according to the annual report of the marine department of the United States Customs at Buffalo. This is a slight increase over the previous season, but the figures fall below the high marks established in 1913, 1917 and 1919, the former being the banner

year in the history of the coal trade on the Great Lakes.

Most of the hard coal shipped out of Buffalo by lake went to Lake Superior ports, largely Duluth and Superior, but Chicago and Milwaukee also took many of the cargoes. The movement of anthracite from the mines to Buffalo was steady throughout the season, but during the closing month of navigation the movement was exceptionally heavy.

For almost 30 years, hard coal shipments out of Buffalo have averaged more than 2,750,000 tons a season and the highest mark was touched in 1913, when 5,033,696 tons were shipped west by boat from Buffalo. The lowest mark in those 30 years recorded by the marine department of the United States Customs was in 1902, when only 631,971 tons were shipped.

In 1920 the anthracite shipments from Buffalo totaled 3,583,286, which is about 230,000 tons under last season's record. In 1917 and 1919 shipments exceeded the 4,000,000 ton mark. More soft coal was received at the port of Buffalo last year than in many seasons, the figures showing 142,500 tons having been handled, compared with 51,200 tons in 1920 and 69,805 tons in 1919.

Most of the anthracite shipped from Buffalo was loaded at the new Lackawanna trestle at the north harbor entrance. Although about 40 per cent of the vessel tonnage on the Great Lakes was idle during the season which has just been brought to a close, there was no difficulty in getting big steel vessels to handle coal shipments to western ports. Rates were low until the closing month of the navigation season, when shippers were forced to bid up for tonnage. The boats which did operate during the season paid handsome returns, because they brought down grain cargoes and took back coal.

The movement of coal over the New York State Barge Canal between Buffalo and Atlantic Coast points was exceptionally small. Few cargoes were handled out of Buffalo this season except for down-state dealers who had facilities for handling coal shipped by water.

REVIEW OF COAL SITUATION

In its review for the week ending January 7, the *Black Diamond* said of the coal situation:

"The coal trade of the country entered the new year suffering not only from the business depression, which can almost be said to have become 'normal,' but also from the fact that many industrial plants were closed down during inventory time and therefore had to shut off coal shipments. Consequently, the demand for steam coal was even lighter than has been the case for some period past, in spite of the fact that the removal of the tax on railroad freight was expected to stimulate buying by the steam trade. Weather conditions, while, speaking generally, are somewhat more favorable to coal consumption than had been the case during the most of December, were not sufficiently changed to effect any real difference in the demand for domestic sizes from the operators. Where household demand showed an increase, the stocks in the hands of the retailers were sufficient to make it unnecessary for any immediate replenishment.

"The wage question, however, is really the matter of prime importance at this time. In union fields where the range in wages has been widened as between those paid in non-union fields, more and more mines were being forced to close down, since the producers are unable to meet the competition which coal produced at a lower cost offers. The week saw smokeless coal moving in the central western markets on a mine run basis at \$2 a ton on contract, which makes this grade a real competitor for all Indiana and Illinois domestic sizes.

"In the east a similar situation exists, non-union coal from West Virginia more and more eating into the markets formerly absorbing a comparatively large tonnage of union outputs. Some operators in the union fields have definitely taken the policy of shutting down their mines until a wage adjustment downward is effected next April, while others are keeping their operations going only sufficiently to meet their contracts.

"Although it is reported that there was a little more life in the New England coal trade during the week, there being heavier buying by the household, the tonnage of coal on hand was sufficient to forestall any change in mine prices. Industrial coal was in weak demand, and prices on all these sizes remained at low levels.

"In New York and Philadelphia the demand for domestic anthracite showed little improvement during the week, while steam coal, whether anthracite or bituminous, was dull. The Baltimore and Buf-

falo trades are marking time, waiting for a revival of industry to give real life and bring business to these markets.

"Production in West Virginia was perhaps at the lowest ebb for this period of the year in the history of the state, with even non-union production being held down because of the falling off of spot business on steam coal. Indications point to a breaking away on the part of several union operators from the union at the request of their employees, who are finding it impossible to further continue in idleness. The output for the state would not average 35 per cent of normal for the week.

"Conditions in the Pittsburgh district and Pennsylvania are, if anything, more adverse than in West Virginia. The steel industry, having improved somewhat from the continued dull condition which has confronted it for weeks past, has again slumped back, with the result that the demand for steam coal is negligible. Such coal as is wanted, buyers insist on taking from non-union producers, since, the cost of production having been lowered, prices quoted are more to their liking.

"Hundreds of mines continue to be closed in Ohio, which state, perhaps more than any other, is today suffering from the competition offered by West Virginia non-union production. Twenty per cent of normal output is probably the average throughout the state, most of the coal being produced going on contract. Industrial activities in Ohio centers show no improvement, and about the only thing which promises relief is a sudden and prolonged change in weather conditions.

"Conditions in Indiana are not so discouraging as in her sister state to the east, but industrially the market remains dormant and the demand for domestic sizes is not anything akin to normal. The Illinois trade is again confronted by unusual competition from smokeless coal, and many Illinois mines have been closed rather than to keep up a futile attempt to meet this non-union competition.

"The Northwest saw a somewhat better trade in domestic sizes as the result of weather conditions, but even so, prices are not being accepted at established levels, anthracite being sold at slight reductions during the week. The industrial situation in the Northwest is no better than is general throughout the nation, and this is having a detrimental effect on the movement of dock coal into the interior."

F. S. Stiles is succeeded in the retail coal and grain business at Davisburg, Mich., by R. W. Pepper.

E. Emmon & Sons have sold their business at Gordon, Ohio, to the Gordon Grain & Mercantile Company.

M. Griffith & Son are succeeded in the retail coal and grain business at Climax, Mich., by the Climax Milling Company.

The new coal storage bins of the Fowlerton Elevator & Supply Company at Fowlerton, Ind., have been completed.

The retail coal and grain business of Holmes Hagaman at Holcomb, Ill., has been purchased by Robert P. Sheaff.

The Farmers Co-operative Company has purchased the retail coal and grain business of J. S. Ellis at McCords, Mich.

R. H. Davenport has purchased the retail coal, grain and hay business of S. L. Davenport, his father, at North Grafton, Mass.

The assets of the Edwards Bros. Coal Company at Tahoka, Texas, have been purchased by the Tahoka Coal & Grain Company.

R. E. Reising is succeeded as manager of the Farmers Grain, Lumber & Coal Company at Thomasboro, Ill., by Albert L. Schaefer.

The plant and business of the Strayer Bros. Company, York, Pa., handling coal and grain, have been purchased by W. L. and J. T. Anderson.

The half interest of A. L. Arthens in Kellogg & Arthens, dealing in coal and grain at Cambridge, Ill., has been bought by Walter Powers.

The retail lumber, grain and coal business of the Marion Warehouse Company at Marion, Pa., has been taken over by the Marion Elevator Company.

The retail coal business and grain elevator of the Wyoming Mill & Elevator Company at Burns, Wyo., has been purchased by the Farmers Elevator & Milling Company.

W. L. Palmer has sold out his retail coal, grain, flour, hay, lime, cement and wood business at Medway, Mass., to the Hinman Coal & Grain Company, a new concern there.

The Hobbs Hay Company of Petersburg, Va., is succeeded by the Hobbs Lumber Company. The business includes a retail coal, lumber and building material business.

The Crete Elevator Company, recently incorporated at Crete (Lynn p. o.), Ind., has taken over the retail coal business and grain elevator of George P. Bowen & Co. John C. Bunch is president and H. L. Welch manager of the firm.

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Peoples Gas Bldg., Chicago

FIELD SEEDS

[Continued from Page 539]

cents to \$1. In general, Millet seed prices have not been well established and are apt to differ widely in a given district.

The quality of practically all kinds of Millet seed is fully equal, if not superior, to that of last year for the country over. This is due largely to favorable weather at harvesting and threshing.

THE SUNFLOWER SEED CROP

It is estimated that the 1921 crop of Sunflower seed in the United States was about 3,000,000 pounds compared with an estimated production in 1920 ranging from 7,000,000 to 10,000,000 pounds. The large decrease is due primarily to a big reduction in acreage in southwestern Missouri, the most important producing section in this country. The 1921 crop in this section was approximately 2,250,000 pounds.

In southern Illinois and the San Joaquin Valley of California the production is estimated at 350,000 and 325,000 pounds respectively, compared with approximately 1,900,000 and 1,300,000 pounds in 1920. Apparently last year's prices, which were considered unsatisfactory by growers, and the larger carry-over than normal were mainly responsible for the great reduction in acreage.

SWEET CLOVER SEED PRICES DECLINE

Sweet Clover seed prices declined 25 cents to 50 cents per 100 pounds on an average between November 15 and December 15. Seedsmen were reluctant to bid on seed because of the quantity offered them and because of no indication of an early demand from the trade. There seldom is, however, much demand for Sweet Clover seed at this time of year as the country merchants prefer to wait until after the holidays before placing their orders.

In northeastern Kansas a grower reports having sent samples of his Sweet Clover to seedsmen in five cities in the Missouri Valley without receiving a bid. A grower of Yellow Sweet Clover in northern Wyoming submitted samples to 11 seedsmen and did not receive a single bid. The growers in most sections apparently have reconciled themselves to the fact that they must either wait until buyers show some inclination to obtain their requirements or sell at unremunerative prices.

In the Red River Valley of North Dakota and Minnesota prices have remained at approximately the same low level for several weeks. In the more important counties \$3.50 to \$4 for thrasher-run and \$4.50 to \$5 for recleaned seed were being offered. Kansas prices for thrasher-run seed ranged mostly from \$3.50 to \$4.25 and were 50 cents to \$1 lower than Nebraska and Illinois prices. In Utah and Colorado more or less nominal prices of \$3.50 to \$4 per 100 pounds for clean seed were being offered and but little seed has moved in these states.

Some movement of the crop occurred during the four weeks ending December 17 but it is generally considered below normal for the season. A number of correspondents estimate that as much as 25 per cent of the crop has moved in a few of the important counties in the Red River Valley. In Kansas, Nebraska, Oklahoma, Illinois, and Kentucky a larger movement than elsewhere has taken place, but even in these states, except Kentucky, the growers are still holding the bulk of the crop.

The late reports on the quality of the crop seem to indicate that it will average a trifle better than that of last year. In most instances only the best fields were harvested because of the low prices,

and this practice seems to have resulted in improving the general quality of the seed now being offered for sale.

NEW YORK SEEDS TRADE INACTIVE

BY C. K. TRAFTON

There has been no general animation in the local market for field seeds, partly because of the great unsettlement existing. In short, there seems to be a wide difference of opinion as to values, and hence many buyers are inclined to hold aloof until they can form a definite conclusion as to what seeds are actually worth. For this reason a comparison of values, with those ruling a month ago, is largely a matter of guess-work and the irregular changes shown are often without particular significance. Still, the prevailing tone at this writing is described as firm by reliable authorities.

Alfalfa prices are virtually unchanged, but the undertone is still firm, partly because western dealers have been buying imported seed here, which is regarded as decidedly significant, doubtless indicating that the domestic crop was much smaller than expected. Moreover, the arrivals showed a marked falling-off, consisting of only one cargo of 394 bags from Argentina, which contrasts sharply with the total of 3,450 bags for November and 6,735 for October. Shippers there are offering in a small way at around 13 cents c. i. f. N. Y. and some business has been done for January shipments.

White Clover has declined approximately 1 cent as stocks have been ample for the small trade requirements. A feature of the latter was the inquiry from as far west as Kansas City, with sales to dealers in Oklahoma and Iowa, which served to confirm recent claims that the Wisconsin crop was only slightly more than 25 per cent of normal. Germany has been offering some good seed at 26@27 cents. There seems to be some doubt about the quality of other offers at 24 cents. Arrivals were small, only 130 bags, against 500 during November.

Red Clover has been slightly firmer in spite of slow dealings and larger foreign arrivals, about 3,700 bags, against 1,940 in November. The December total included about 1,250 bags from Chile, but that country is now believed to be virtually through exporting in this direction as no further quotations are being received. Little or no business has been done with France where markets are evidently greatly unsettled. Some good seed has been offered at 19@21 cents, but there seems to be a general disposition to wait until prices work down closer to an American parity. Germany has offered small lots at 18 cents and contributed roundly 2,000 bags to the month's arrivals. In spite of the prejudice against Italian seed, about 450 bags were imported from that country, with some additional business done, partly at 17½ cents.

Crimson Clover has gained from 1½ to 2 cents. Although trade has been quiet, holders have been firmer in their views owing to unsatisfactory advices from France. Some shippers there claim that the crop was decidedly inferior and that supplies of choice quality have been completely exhausted. It is evident that opinions as to values differ widely as offerings range from 9½ to 11

cents. This unsettlement has checked import buying, but the month's arrivals aggregated about 1,000 bags, against 300 during November.

Alsike also developed firmness, although exports were still light, about 390 bags, compared with 300 in November. Germany has offered some nice seed at 17½ cents.

Redtop has advanced about 2 cents as visible supplies are small and strongly controlled. Moreover, exports were larger—roughly 1,150 bags, about equally divided between Denmark and the United Kingdom. This compares with 600 bags in November.

Kentucky Bluegrass has gained about 1 cent, although there has been no particular feature. Exports were about 330 bags, against 230 in November.

Rye Grass has been firmer, largely owing to stronger advices from the United Kingdom. English shippers quote 9 cents c. i. f. New York, but state that they have practically no stocks of choice seed. Their surplus of old crop seed is said to be too poor to pass the United States import tests, and hence will be used in the domestic trade. The December arrivals amounted to only 2,810 bags, against 3,250 in November. The month's total included 250 bags from Germany and 840 from Argentina.

Timothy has been firm in spite of a dull trade, notably for export. The month's exports were only 760 bags, against 4,570 in November.

Rapeseed has eased off slightly, despite fair dealings. Holland is asking slightly higher prices, 5½ cents c. i. f., which is out of line with our basis. Still, arrivals were larger, about 1,335 bags, compared with 850 during November.

Sunflower seed on the spot has been firmer, being quoted at 3¼ to 3½ cents in carload lots. Argentina is evidently well cleaned up on old crop seed. Shippers there claim that the remnant is not of suitable quality for export, and bids of 2¼ c. i. f. New York have not resulted in business. Still, some orders have been placed for new crop seed for February-March shipment. Arrivals for December were 5,690 bags, compared with 6,650 in November. Practically all of the recent arrivals were sold in advance.

Canary seed has been quiet and unchanged at about 3-cent duty paid. The month's arrivals were much smaller, about 300 bags, against 800 for November.

Fescue exports for the month totalled about 960 bags, against 1,060 during November. About 225 bags arrived from Australia and 120 from Germany, which compares with the November total 170 bags.

Orchard grass arrivals were 200 bags, against 917 in November. Vetch arrivals were 300 bags, against 375 in November.

A. E. Reynolds of Crabbs, Reynolds & Taylor, prominent seed merchants of Crawfordsville, Ind., was a recent visitor in the local market.

A. W. Wetsel of the Wetsel Seed Company, Harrisonburg, Va., called on members of the local seed trade during the first week in January.

The Mangelsdorf Seed Co.

Sweet Clover, Alfalfa,
Soudan Grass, Millet, Rape.

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SEED

We buy and
sell all varieties
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MINNEAPOLIS CHICAGO

ALFALFA SEED IN KANSAS

Reports from Kansas place the value of the 1921 crop of Alfalfa seed in that state at \$411,000. The estimated yield was 62,000 bushels from 27,600 acres, or an average of 2¼ bushels to the acre. The seed as it comes from the thresher is valued at about \$6.65 a bushel.

This year's seed output is not more than enough for home consumption if Kansas is to maintain its long-time leadership in Alfalfa. The total acreage of Alfalfa in Kansas as of March 1, 1921, was 1,065,000 acres, or 166,000 acres less than for the year preceding, while there was a considerable falling off since March 1 this year owing to loss from late Spring freezes and depredations of the pea aphid. According to the usual quantity of 30 pounds to the acre in sowing, this year's seed crop would plant 186,000 acres, and this much and more must have been seeded last fall or before March 1, next year, to keep the Alfalfa acreage up to the standard of the past few years. Planting more Alfalfa would probably be one of the best things farmers could do, and the extension of acreage in this crop should be such at least as to utilize this year's production.

CANADA'S OPPORTUNITIES FOR SEED

BY C. H. BROOKS

Geo. H. Clark, Dominion Seed Commissioner, who recently attended the International Seed Control Conference at Copenhagen, is of the opinion that Canada imports much seed that she might well produce herself, while her exports of Red Clover seed might be trebled with profit, both soil and climate being ideal for its production. European seed experts, he claims, recognize Canadian Alsike, Red Clover and Timothy seeds as the cleanest and best that the world produces, though Alsike is not popular with them.

"Canada imports Orchard Grass, when a better quality could be produced at home, that grown in the clay belt of Northern Ontario, for instance, being unsurpassed in quality," says Mr. Clark, "and if Canadian growers would produce this grass and Timothy they are assured of a good market for substantial quantities at prices more remunerative than can at present be secured for oats."

Mr. Clark is of the opinion that ideal conditions exist in Alberta, Northern Ontario and Quebec for the production of far better White Clover seed than can be imported. A supply of Wild White Clover seed has been ordered from Scotland where-with to establish a seed-producing center at Kapuskasing in the clay belt of Northern Ontario.

Field, root and garden seed production in Canada is progressing, Mr. Clark believes. Much of this seed has hitherto been imported from Denmark at unusually low prices owing to overproduction there. The production area of these seeds has, however, owing to past losses, been reduced to one third of normal, and Canada's opportunities are thereby greatly increased.

CLOVER SEED HIGHER

"Clover continues to be in a class by itself, ruling higher again this week in face of the sharp decline in grains," say Southworth & Co., in letter of January 7. "Good demand, with offerings light. Some fresh hedging sales and profit taking on the scale up."

"A large French dealer writes 'Although the new crop of Red Clover was short there was considerable old seed carried over. Country offerings are more liberal and farmers anxious to sell at present market or lower.'"

"We received several samples of French Clover this week. The quality is very good and could easily be cleaned into prime."

"A large interior dealer writes 'It seems as

though the large dealers through the East are going to be aggressive buyers, as they have not been successful in contracting for importations, owing to the failure of the crop abroad, as freely as in previous years. Inquiries with us are very active, and it looks as though a liberal business is going to result and weather is favorable."

"The United States Department of Agriculture states that the larger portion of the Clover crop, estimated at about 70 per cent, has already been sold by growers, also 80 per cent of the Alsike and nearly 90 per cent of the Timothy."

"We have had numerous reports from Ohio, Indiana and Michigan regarding Clover situation. They state that offerings of cash article are light, and if dealers have any seed they are not anxious to sell at present prices. It looks as though much of the Clover that has been marketed to date has been hedged or has found its way to Toledo. Stocks of Clover in dealers' hands not burdensome, and with brisk cash demand this spring could be readily absorbed."

"Total stocks here at present about 21,000 bags. Receipts this week 1,253 bags against 686 last week and 741 last year. Total this season to date 24,826 bags against 19,260 last year and 15,067 bags two years ago. Shipments this week 788 bags against 686 last week and 741 year ago. This season 6,206 against 8,234 last year and 7,849 two years ago. New York reports imports 1,463 sacks."

"Alsike firm. Trade inactive. Many feel Alsike good property at the discount under Clover."

[Continued on next page]

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FOR SALE AT A BARGAIN

Fine concrete elevator and malt house. Property suitable for storing, cleaning, drying, malting, etc.;



150,000-bushel storage capacity. Transit rates. Property can be converted to other manufacturing purposes. Will consider terms. Write A. J. PICK, West Bend, Wis.

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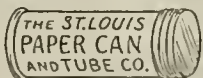
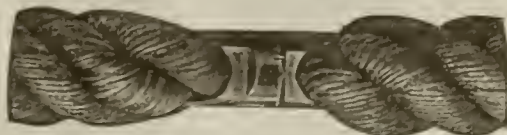
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60-horsepower Fairbanks-Morse.
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Use Our Grain Dealers Sample Cases

St. Louis
MissouriHunt Coupling for Controlling the Stretch
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Ask for Descriptive Catalog M-15-1
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FOR SALE

Pulleys, 1,000; all sizes, solid cast iron, wood and steel split. Elevator bolts and buckets and supplies. STANDARD MILL SUPPLY COMPANY, Kansas City, Mo.

FOR SALE

Type Y 25-horsepower Fairbanks-Morse Crude Oil Engine; one 30-horsepower Chicago Pneumatic Crude Oil Engine. A. H. McDONALD, 545 W. Monroe St., Chicago, Ill.

BAGS

FOR SALE—BURLAP BAGS OF EVERY KIND

New or second-hand, plain or printed with your brand; seamless cotton grain bags; sample bags; burlap, cotton, sheeting, or paper for car lining, etc.

Wanted: Second-hand bags; best prices paid. WILLIAM ROSS & CO., 409 N. Peoria St., Chicago, Ill.

Miscellaneous
Notices

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

WANTED

To hear from owner having elevator, mill or other property for sale. Give cash price and particulars. JOHN J. BLACK, Chippewa Falls, Wis.

WANTED

Bookkeeper-stenographer, also experienced in general office work, desires position in grain or milling business in Texas or Oklahoma. Excellent references furnished. BOX 272, Sherman, Texas.

FLOUR AND MILL FEEDS

Mixed cars of flour and mill feeds in 100-pound sacks are our specialties. Would like to send you a trial order to convince you of the superiority of our products. ANSTED & BURK CO., Springfield, Ohio.

RAILROAD CLAIMS COLLECTED

WE COLLECT RAILROAD CLAIMS covering loss or damage to grain, flour and mill products. Do not overlook delay, shortage, decline in market and deterioration claims. We have an extensive organization for handling these matters. References: Any Minneapolis bank or the Northwestern Miller. We are members of the Grain Dealers National Association and the Traffic Club of Minneapolis. This service is furnished on a percentage basis. No collection, no pay.

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DOES THE BUSINESS

A. H. McDonald, the well known dealer in engines, 544 W. Monroe St., Chicago, writes us:

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The classified columns of the AMERICAN ELEVATOR AND GRAIN TRADE are your best medium for finding a purchaser for your elevator or mill, for selling odd lots of new or used machinery, bags, seeds, feeds, etc., for locating a position or for obtaining help.

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prompt estimates.

THE SYKES CO.

930 W. 19TH PLACE CHICAGO, ILL.

Receipts this week 147 bags, shipments 246. New York reports exports 292 bags.

"Timothy slightly higher. Trade more active. Good demand on setbacks, with profit taking and some fresh hedging sales on bulges. Receipts this week 690 bags, shipments 482. Baltimore reports exports 41,613 pounds."

KANSAS CITY SEED TRADE

BY B. S. BROWN

Trade in seeds continues dull and most quotations are nominal. Alfalfa, Timothy and Clover are available, in moderate quantities. Carlots of Alfalfa from first hands are quoted at \$9 to \$12 a hundredweight if quality is good. Timothy is quoted \$3.75 to \$4.75 a hundredweight and Clover is worth about \$12 to \$17. The resale price of cleaned Bluegrass ranges from \$35 to \$46. The following prices are nominal: Millet, 90 cents to \$1.25; Sudan, \$2 to \$2.50; Cane, \$1 to \$1.20.

Dealers generally were anxious to see the new year open. Better conditions in the trade are expected to prevail eventually, though no sudden improvement in demand is expected to develop. The lower freight rates are expected to result in a better movement and free offerings from the more distant shipping points. Practically no old stock has been carried over. Demand is generally limited to the better grades of all seed. Offerings of Alfalfa are moderate. Most dealers say they expect an active trade in Clover, Timothy and Bluegrass this spring. Supplies of Millet are expected to be small, due to the short crop.

THE SEED TRADE AT MILWAUKEE

BY C. O. SKINROOD

One of the noteworthy features of the Clover trade at Milwaukee for the month of December was the shipments of Clover seed which amounted to 1,207,004 pounds, which was almost exactly twice as much as the total received—656,811 pounds. The Clover trade even from the standpoint of receipts was large compared with a year ago, the receipts of 656,000 pounds in round numbers comparing with 76,375 pounds a year ago, or about nine times as large. Shipments of Clover seed as stated for the past month, in excess of 1,207,000 pounds compared with shipments for the corresponding month a year ago of 131,284 pounds, so that shipments were also about nine times as large as a year ago.

The figures on Timothy trade are less erratic, receipts for the past month being 377,560 pounds, as compared with 167,630 pounds a year ago. Shipments of Timothy seed in the past month were 170,105 pounds as compared with shipments for the same period of 1920 of 72,190 pounds. Both receipts and shipments were about twice as large as a year ago.

These figures indicate that, considering only the past month, receipts of Timothy seed were twice as large as shipments, while in Clover seed, shipments were about twice as large as the receipts.

Considering the figures for the past year the seed movement at Milwaukee presents some highly interesting aspects. For the whole year 1921, the receipts of Clover seed were 3,136,000 pounds as compared with 13,826,000 pounds received for 1920. Receipts of Clover seed in the past year were therefore about one fourth of those of the year previous, a falling off in a single year's receipts of more than 10,000,000 pounds.

The shipments of Clover seed in the past year were 2,171,000 pounds as compared with shipments

for 1920 of 14,422,000 pounds. Shipments of Clover seed in the past year were therefore about one seventh of what they were a year previous.

While Timothy seed also fell off in 1921, the decline was not nearly so bad as in Clover seed, the receipts being 8,818,000 pounds as compared with 11,472,000 pounds received in the year previous. Receipts of Timothy seed therefore fell off about one third from those of the previous year.

Shipments of Timothy seed for all of 1921, were 10,688,000 pounds as compared with 11,909,000 pounds in the previous year. This meant a drop in shipments which was rather slight—just a little over 1,000,000 pounds or about one tenth.

The receipts of flax seed for 1921 at Milwaukee were 798,000 bushels as compared with 800,000 bushels received in 1920. The receipts declined just a trifle in the past year. Shipments of flax seed in the past year were 57,000 bushels compared with 11,000 bushels shipped in the year previous. Even the enlarged shipments of 1921 were very small compared with receipts, indicating that the great bulk of flax seed received here is ground and used in the local industries.

Milwaukee also became a big market for peas in the past year with receipts of 302,000 bushels, compared with only 37,000 bushels received for 1920. Trade was multiplied by eight in a single year. Shipments of peas were 41,000 bushels compared with 17,000 bushels in round numbers in the preceding year. Shipments of peas were also light compared with the receipts.

Receipts of beans in 1921 were 7,616 bushels compared with 8,600 bushels in the preceding year. Shipments for the past year were 28,000 bushels compared with 18,000 bushels shipped in 1920. Trade in beans was of small proportions as compared with peas.

The official report of the Chamber of Commerce on the seed market for the past month indicates a steady undertone in the seed trade with a good demand which absorbed most of the offerings from day to day. Red Clover prices ranged for the month from \$15 to \$19. Alsike sold at \$11 to \$16, White Clover ranged from \$32 to \$40, Flax was \$1.78 to \$1.96, Timothy sold at \$4 to \$5.25 for the poor to good and at \$5.50 to \$6.25 for the choice to fancy.

As a result of the big potato and grain show held at Milwaukee, known as the Indoor State Fair, the farmers of Bayfield County alone report orders for about 2,400 bushels of pedigreed seed grains. The grains included, Spring and Winter wheat, barley, soy beans, and marrowfat peas. Oats for seed sold at \$1 a bushel, barley for \$1.25 and wheat for \$2 a bushel. Many other counties in the state also took orders for thousands of bushels of seeds of various kinds, it is reported.

The seed trade outlook is good, while present business is also satisfactory, according to the Courteen Seed Company. The firm reports that offerings of seeds are very light and the demand is increasing so that good seed trade is assured at least up to May 1. The Courteen company lists Red Clover at \$20 to \$22, Timothy at \$6 to \$6.50, Alfalfa at \$16.50 to \$17, White Blossom Sweet Clover at \$7 to \$7.50 and Alsike at \$16.50 to \$19.

The Kellogg Seed Company is also optimistic about the prospects for a good seed business. The company bases its prediction largely on the more hopeful conditions reported among the farmers. With general business on the upgrade, it is believed certain that the seed trade will share in the general wave of expansion. The Kellogg company quotes Timothy at \$6.25 to \$7.25, Red Clover at

\$21 to \$22.50, Alsike at \$13 to \$17.50, Kansas Alfalfa at \$17, South Dakota Alfalfa at \$18.50, and white blossom Sweet Clover at \$7 to 8.50. Farmers have largely sold their Red Clover and Timothy seed it is believed, but they still hold some of their Alsike, according to reports.

The L. Teweles Seed Company believes that the worst has been passed in the seed trade and that from now on business will be very good. The company makes the prediction that by February 1 business should be still more active. With the general economic outlook getting better every day, the company believes that the seed business will surely share in whatever improvement there is in other lines. There is little Red Clover moving, the company says, while demand is good and prices are around \$20. Alsike receipts are just fair it is said with prices at \$17. Alfalfa sells at \$16. Demand for Timothy is said to be good with price about \$6. A good demand and big supply is reported for white blossom Sweet Clover, which is quoted by the company at \$7 to \$9.

Higher prices for seeds because of strong demand, is the report on trade given by the North American Seed Company. The concern says trade is active and that improvement is likely to go on week by week. Predictions are made that within two weeks, the spring demand for seeds should be close to the maximum. The North American says Red Clover is coming in small quantities with prices ruling from \$19 to \$23. The high class Alsike is said to be scarce with prices at \$15 to \$18.50. The farm supply of Timothy is reported to be largely cleaned up, receipts being light, while demand is unusually heavy. Timothy is quoted from \$5.50 to \$7. Alfalfa is reported higher, with prices at \$16 to \$19. Well colored is said to be scarce, while demand is strong.

NEW SEED TRADEMARKS

In the *Official Gazette* of the U. S. Patent Office under date of December 27, the following new seed trademarks were published: "Exchange Brand Seeds for Quality" farm seed, namely, Clover, Tim-



othy, Red Top, Alfalfa Cane and Millet. Springfield Seed Company, Springfield, Mo. Filed October 17, 1921. Serial No. 154,241. Agricultural and horticultural seeds. Peter Henderson & Co., New York, N. Y. Filed July 27, 1921. Serial No. 151,004.

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Mangelsdorf Seed Co., Seeds.*

BALTIMORE, MD.

England & Co., Chas., grain, hay receivers.*†
Fahey & Co., John T., receivers, exporters.*
Hax & Co., G. A., grain and hay receivers.*†
Macneal & Co., Walter F., grain, hay.*†

BLOOMINGTON, ILL.

Worth-Gyles Grain Co., buyers, shippers cash and future grain.*

BUFFALO, N. Y.

Eastern Grain, Mill & Elevator Corporation, wheat, rye, corn, barley, oats.*†
Electric Grain Elevator Co., consignments.*†
McConnell Grain Corporation, grain.*†
McKillen, Inc., J. G., receiver.*
Pratt & Co., corn, oats, wheat.*
Ratcliffe, S. M., grain and hay.*†
Seymour-Wood Grain Co., grain commission, consignments, brokers.*
Townsend-Ward Co., receivers and shippers.*
Whitney-Eckstein Seed Co., wholesale seed merchants.

CAIRO, ILL.

Halliday Elevator Co., grain dealers.*

CEDAR RAPIDS, IOWA.

King-Wilder Grain Co., buyers and shippers.*

CHATTANOOGA, TENN.

Harbin, A. D., hay, grain and mill feeds.

CHICAGO, ILL.

Armour Grain Co., grain buyers.*
Bache & Co., J. S., grain, seeds, consignments.
Bailey & Co., E. W., commission merchants.*
Bartlett Frazier Co., receivers and shippers.*
Dickinson Co., Albert, seeds.
Dole & Co., J. H., commission merchants.*
Freeman & Co., Henry H., hay, straw, grain.*
Gerstenberg & Co., grain and seeds.*
Harris, Winthrop & Co., grain, stocks, bonds.*
Hitch & Carder, grain commission.*
Hoit & Co., Lowell, com. grain, seeds.
Hulburd, Warren & Chandler, com. merchants.*
Illinois Seed Co., seed merchants.
Lamson Bros. & Co., commission merchants.*
Leland & Co., E. F., grain and seeds.*
McCarthy Bros. Co., grain commission.
McKenna & Dickey, com. merchants.*
Miller & Co., Albert, hay and produce.*
Norris Grain Co., grain merchants.*
Paynter, H. M., grain commission.
Pope & Eckhardt Co., grain and seeds.*
Quaker Oats Co., wheat, corn, oats, barley, rye.
Randall & Co., T. D., hay and straw.
Rosenbaum Grain Co., J., shippers.*
Rumsey & Co., grain commission.*
Sawers Grain Co., grain commission.*
Schiffin & Co., Philip H., com. merchants.*
Shaffer, J. C., & Co., grain merchants.*
Updike Grain Co., consignments.
Wagner & Co., E. W., receivers, shippers.*
Wegener Bros., grain commission.*

CINCINNATI, OHIO.

Bender, A., grain, hay, mill feed.*†
Brouse-Skidmore Grain Co., rec. & shipper.*†

CLEVELAND, OHIO.

Cleveland Grain & Milling Co., receivers and shippers.*†
Shepard, Clark Co., grain merchants.*†
Strauss & Co., H. M., hay, grain, seeds.*

CRAWFORDSVILLE, IND.

Crabbs-Reynolds-Taylor Co., grain, seeds.*†

*Members Grain Dealers' National Association.

DENVER, COLO.

Ady & Crowe Mercantile Co., grain, hay, beans.*†

DECATUR, ILL.

Baldwin & Co., H. I., grain dealers.*
Dewein-Hamman Co., buyers and shippers.*

DES MOINES, IOWA.

Des Moines Elevator & Grain Co., grain merchants.*
Mid-West Consumers' Grain Co., grain merchants.*
Taylor & Patton Co., grain merchants.*

DETROIT, MICH.

Dumont, Roberts & Co., receivers, shippers.*

DULUTH, MINN.

White Grain Co., grain and hay.*†

GREENSBORO, N. C.

Moon-Taylor Co., grain, feed and hay brokers.*†

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Boyd Grain Co., Bert A., grain commission.*
Hayward-Rich Grain Co., commission and brokerage.*
Kinney, H. E., Grain Co., grain, hay, feed.*†
McCardle-Black Co., grain commission.*
Steinhart Grain Co., grain commission.*
Witt, Frank A., grain commission and brokerage.*

KANSAS CITY, MO.

Davis Grain Co., A. C. grain commission.
Moore-Lawless Grain Co., grain receivers.*
Moore-Seaver Grain Co., corn and oats.*
Peppard Seed Co., J. G., alfalfa seed, millet.

LIMA, OHIO.

Hurley Buchholtz Co., wholesale grain, hay, straw.*

LOUISVILLE, KY.

Edinger & Co., grain, hay, feed.*†

LITTLE ROCK, ARK.

Wilson Co., Jno. R., corn, oats, mill feeds.

LYNCHBURG, VA.

Moon-Taylor Co., grain, feed and hay brokers.*†

MEMPHIS, TENN.

U. S. Feed Co., receivers and shippers.*†

MIDDLEPOINT, OHIO

Pollock Grain Co., wholesale grain, hay.*

MILWAUKEE, WIS.

Bacon Co., E. P., grain commission.*
Blanchard Grain Co., grain merchants.*
Courteen Seed Co., seeds.
Donahue-Stratton Co., buyers and shippers.*
Franke Grain Co., receivers and shippers.
Kamm Co., P. C., grain merchants.*
La Budde Feed & Grain Co., wholesale feed, grain hay.
Milwaukee Seed Co., seed.*
North American Seed Co., seed.

MINNEAPOLIS, MINN.

Cereal Grading Co., grain merchants.*
McCaull-Dinsmore Co., com. merchants.*
Quinn, Shepherdson Co., grain merchants.*

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Meadows, J. A., buyer, hay, grain and feed.*†
†Members National Hay Association.

NEW CASTLE, PA.

Hamilton Co., grain, feed, flour, hay, potatoes.*

NEW YORK, N. Y.

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Nungesser-Dickinson Seed Co., seeds.
Power & Co., W. D., hay, straw, produce.*†

NORFOLK, VA.

Moon-Taylor Co., grain, feed and hay brokers.*†

PEORIA, ILL.

Bowman & Co., Geo. L., grain commission.
Dewey & Sons, W. W., grain commission.*
Harrison, Ward & Co., receivers and shippers.
Luke Grain Co., grain commission.*
Miles, P. B. & C. C., grain commission.*†
Mueller Grain Co., receivers and shippers.*
Turner-Hudnut Co., grain commission.*

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Young & Co., S. H., grain, flour and feeds.

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TIFFIN, OHIO.

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TOLEDO, OHIO.

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King & Co., C. A., grain and seeds.*†
Raddatz & Co., H. D., grain, seeds.*
Southworth & Co., grain and seeds.*†
Wickenhiser & Co., John, grain dealers.*

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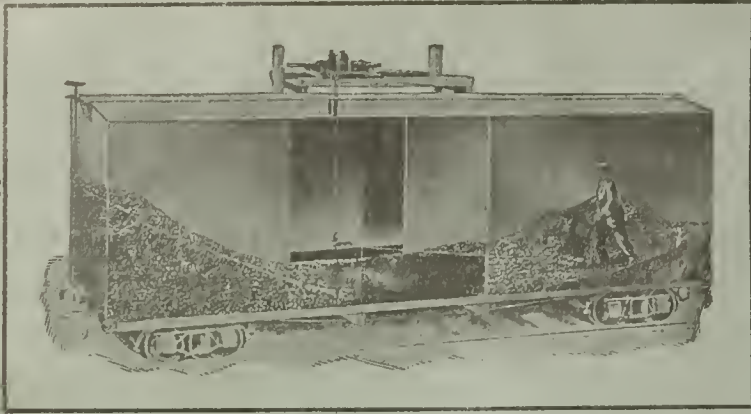
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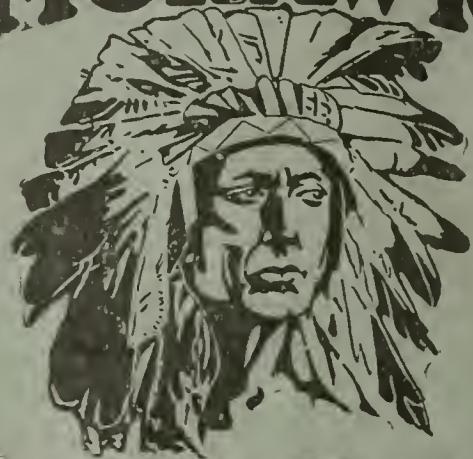
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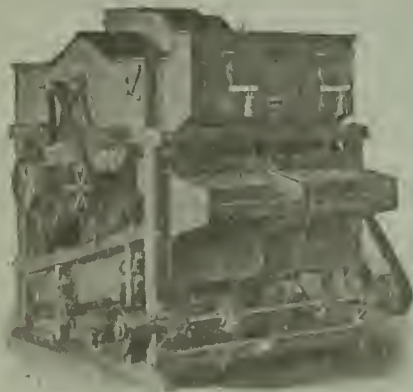
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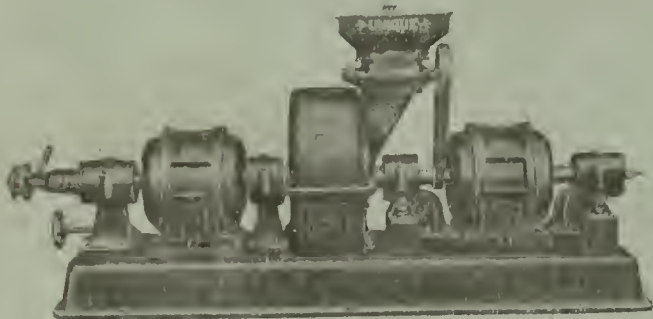
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